

# Durham E-Theses

---

## *Use of the balanced scorecard to enhance motivation in an Indonesian business setting*

Suhaemi, Swati

### How to cite:

---

Suhaemi, Swati (2007) *Use of the balanced scorecard to enhance motivation in an Indonesian business setting*, Durham theses, Durham University. Available at Durham E-Theses Online:  
<http://etheses.dur.ac.uk/1840/>

### Use policy

---

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

---

Academic Support Office, Durham University, University Office, Old Elvet, Durham DH1 3HP  
e-mail: [e-theses.admin@dur.ac.uk](mailto:e-theses.admin@dur.ac.uk) Tel: +44 0191 334 6107  
<http://etheses.dur.ac.uk>

# **Use of the Balanced Scorecard to Enhance Motivation in an Indonesian Business Setting**

**Swati Suhaemi**

Submitted to obtain the degree of  
**Doctor of Education**

**University of Durham**

**School of Education**



The copyright of this thesis rests with the author or the university to which it was submitted. No quotation from it, or information derived from it may be published without the prior written consent of the author or university, and any information derived from it should be acknowledged.

© Swati Suhaemi  
2007

17 OCT 2007



Praise be to my **Lord and Savior, Jesus Christ**, who enabled me to complete my thesis, and  
gave me a loving husband and wonderful son.



# **Use of the Balanced Scorecard to Enhance Motivation in an Indonesian Business Setting**

## **Abstract**

The Balanced Scorecard is a tool widely used in the West, particularly in the United States, for improving motivation and performance in industry and commerce. It has not been widely used previously in Indonesia. This thesis reports its design and implementation as a pilot study with the sales force at IMT, a prominent automotive company in Jakarta.

This study identified factors motivating the sales force, and also aspects of adaptive and potentially maladaptive motivational styles, by distributing two sets of short questionnaires, before and after the implementation of the balanced scorecard. Informal interviews and focus groups were conducted to provide supplementary information.

The key results were:

- a. Economic rewards and supportive teamwork were considered more important than competition.
- b. Most respondents claimed to adopt key aspects of a mastery oriented motivational style.
- c. There was no significant shift in adoption of key aspects of motivational styles, nor in perception of motivating factors from the pre to the post-implementation questionnaires. Although analysis of questionnaires before and after implementation of the BSC did not reveal statistically significant changes, information from interviews was generally positive about the BSC.
- d. In the Indonesian cultural context, motivational style, actual work performance measured in the BSC, and cognitive ability measured by critical reasoning tests had no apparent relationship with each other.

In Indonesia, competition is considered an improper behavior because Indonesian society has one of the lowest world rankings for *individualism*. Thus, supportive teamwork is an important factor in motivation, but competition is believed to undermine the culture of togetherness. Economic rewards are considered important to preserve status, as Indonesian people place a great deal of concern on power maintenance and, compared with other countries, have a high ranking for power distance. Numerous studies have emphasized the importance of instrumental motivation and respondents were clear about the importance of material rewards. Based on Kelly's (1955) concept of personal construct psychology, the two basic influences in Indonesian business setting can be seen as: the beliefs and expectations of the people and the social and cultural conditions they have created.

Numerous successes in implementing the balanced scorecard have been reported in the west, in terms of enhanced motivation and strengthening of values. However, the

environment in Indonesia is quite different to that in western countries. The adoption of key aspects of motivational styles and perception of motivating factors did not change much following the implementation of the balanced scorecard. In conclusion, although this pilot study did not find statistical evidence of benefits following introduction of the BSC, the results are sufficiently encouraging to justify a further and larger scale investigation.

## Table of Content

Abstract	i
Table of Content	iii
List of Tables	v
List of Appendices	vi
List of Charts	vi
List of Graphs	vi
List of Abbreviation	vii
<b>Chapter 1 Introduction</b>	
1.1 General Background	1
1.2 Problem and Prospect	2
1.3 Purpose of the Study	4
1.4 Scope and Limitation of the Study	4
1.5 Organization of the Study	5
1.6 Contribution of the Study	6
<b>Chapter 2 Theoretical Background and Literature Review:</b>	
<b>Motivation Construct in Indonesia</b>	
2.1 Definition of Motivation	8
2.2 Approaches to Motivation Theory	9
2.3 Cultural Background of Indonesia	14
2.4 Ways of Understanding Motivation and Their Relevance in Indonesian Culture	20
2.5 Motivation Constructs in Indonesian Business Setting	30
2.6 Motivational Style Adoption	39
<b>Chapter 3 Theoretical Background and Literature Review: Balanced Scorecard</b>	
3.1 The Balanced Scorecard	42
3.2 Critiques of the Balanced Scorecard	56
3.3 Development of the Balanced Scorecard at IMT	63
3.4 Issues in Developing Balanced Scorecard at IMT	82
3.5 Conclusion	83
3.6 Related Previous Studies	84
<b>Chapter 4 Framework of the Study and Research Methodology</b>	
4.1 Definition of Variables and Scope of the Study	87
4.2 Research Instruments	98
4.3 Framework of the Study	108



4.4	Reliability	110
4.5	Validity	111
4.6	Type of Investigation	115
4.7	Data Collection Method	117
4.8	Data Analysis	118
 <b>Chapter 5 STUDY RESULT: Motivating Factors in Indonesian Business Setting and the Impact of Balanced Scorecard in Motivation</b>		
5.1	Results from Questionnaires	119
5.2	Focus Group Results	143
5.3	Interview Results	147
5.4	Summary of Results	151
 <b>Chapter 6 STUDY RESULT: Motivation, Level of Cognitive Ability, and Performance in Indonesian Cultural Context</b>		
6.1	Motivation and Level of Cognitive Ability	156
6.2	Level of Cognitive Ability and Performance	162
6.3	Motivation and Performance	163
6.4	Discussion	166
 <b>Chapter 7 Discussion and Conclusion</b>		
7.1	Overall Review	168
7.2	Summary of Findings	168
	7.2.1 Motivational Drivers in Indonesian Business Setting	169
	7.2.2 Impact of the Implementation of BSC on Employees' Motivation	174
	7.2.3 Association between Motivation, Level of Cognitive Ability and Performance in the Indonesian Cultural Context	183
7.3	Business and Educational Implication of the Study	184
7.4	Limitation of the Study	186
7.5	Conclusion	188
7.6	Recommendation for Further Study	188
7.7	Reflection on the Research	189
References		191

## List of tables

Table 2.1	Categorization of Rewards	36
Table 3.1	Company balanced scorecard of IMT	71
Table 3.1	Departmental Balanced scorecard of IMT	73
Table 3.3	Personal balanced scorecard of IMT	75
Table 3.4	Example of Personal balanced scorecard of IMT	78
Table 5.1	Percentage of Results of Part A before BSC implementation	120
Table 5.2	Mean Rating of Part A before the BSC implementation	123
Table 5.3	Results of Part B before the BSC implementation	124
Table 5.4	Results of Part C before the BSC implementation	125
Table 5.5	Percentage of Results of Part B and C before BSC implementation	126
Table 5.6	Comprehensive results of Part A	127
Table 5.7	Mean rating of answers to Part A	128
Table 5.8	Mean rating of answers to Part B	130
Table 5.9	Mean ratings of answers to Part C	131
Table 5.10	Comprehensive Results of parts B and C	133
Table 5.11	Focus Group Result	146
Table 5.12	Summary of interview result	148
Table 5.13	Summary of Results	151
Table 6.1	Motivational styles and level of cognitive ability, before BSC implementation	157
Table 6.2	Motivational styles and level of cognitive ability, before the BSC implementation, combined category	158
Table 6.3	Expected frequencies of Motivational styles and level of cognitive ability, before the BSC implementation	158
Table 6.4	Calculation of chi-square on motivational styles and level of cognitive ability, before the BSC implementation	159
Table 6.5	Motivational styles and level of cognitive ability, after the BSC implementation	160
Table 6.6	Motivational styles and level of cognitive ability, after the BSC implementation, combined categories	161
Table 6.7	Expected distribution of motivational styles and level of cognitive ability, after the BSC implementation	161
Table 6.8	Calculation of chi-square on motivational styles and level of cognitive ability, after BSC implementation	161
Table 6.9	BSC performance and Motivational styles	165
Table 6.10	BSC performance and Motivational styles, combined categories	165



Table 6.11	Expected frequencies of chi-square on BSC performance and Motivational styles	165
Table 6.12	Calculation of chi-square on BSC performance and Motivational styles	166

### **List of Appendices**

Appendix 1	Questionnaires before the implementation	201
Appendix 2	Questionnaires after the implementation	202
Appendix 3	Set of Critical Reasoning Tests before the implementation of BSC	203
Appendix 4	Set of Critical Reasoning Tests after the implementation of BSC	212

### **List of chart**

Chart 3.1	Strategy mapping within strategy-focused organization.	52
Chart 3.2	Strategy map of Indomobil Multi Trada	66
Chart 4.1	Framework of Study	107
Chart 7.1	Framework of Study	169

### **List of Graphs**

Graph 5.1	Lack of luck as attribution to failure	134
Graph 5.2	Difficulty as attribution to failure	135
Graph 5.3	Lack of efforts as attribution to failure	135
Graph 5.4	Lack of ability as attribution to failure	136
Graph 5.5	Vision repeated as motivating condition in workplace	137
Graph 5.6	Self confidence as motivating condition in workplace	137
Graph 5.7	Being part of the big project as motivating condition in workplace	138
Graph 5.8	Less competition as motivating condition in workplace	139
Graph 5.9	Feedback control as motivating condition in workplace	139
Graph 5.10	Tools as motivating factor	140
Graph 5.11	Top management's commitment as motivating factor	141

Graph	5.12	Environment as motivating factor	141
Graph	5.13	Co-workers' support as motivating factor	142
Graph	5.14	Rewards as motivating factor	142
Graph	6.1	Distribution of critical reasoning test scores on motivational styles, before the BSC implementation	157
Graph	6.2	Distribution of critical reasoning test scores on motivational styles, after the BSC implementation	160
Graph	6.3	Distribution of performance results on motivational styles after the BSC implementation	164

### **List of Abbreviation**

BSC	= Balanced Score Card
IMT	= Indo Mobil Trada, the object of the study

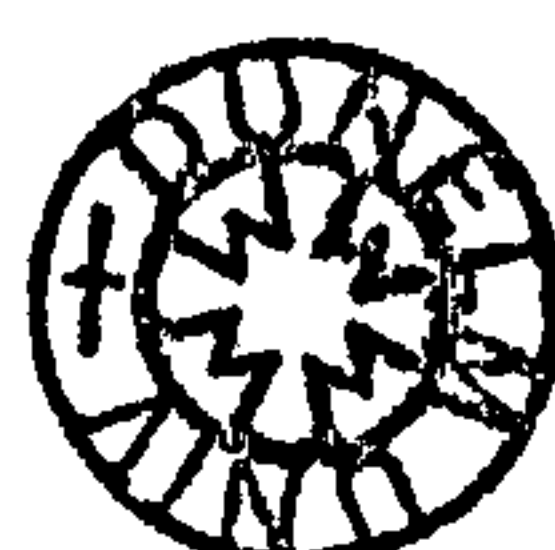
# **Chapter One**

## **INTRODUCTION**

### **1.1. General Background**

Motivation constitutes a central element in the process of achieving success. In the workplace, if a business entity does not possess the ability to motivate its employees, the resources within the organization are not used to the maximum. Therefore, it should be the aim of every successful firm to identify factors that enable it to motivate its employees to take advantage of every opportunity to optimize the resources available. It is believed that social aspects of the firm's work environment have effects on the motivation and behaviour of the management and employees. As Galloway and Leo stated (1996), motivational style is more likely to be a product of situational than individual variables. Holding to this belief, managers, practitioners and researchers have been trying to create and develop tools, methods and techniques to enhance people's motivation to reach the ultimate goal of the firm.

Performance measurement systems play an important role in firms, providing information on the achievement or otherwise of an organization's competitive strategy, and linking that strategy to operations. An effective performance





measurement system will explain the organization's visions and goals to all members of the organization. A new widely used tool is the balanced scorecard, produced by Kaplan and Norton in 1992 (Kaplan and Norton, 1992). The balanced scorecard gains it popularity in North America right after it was introduced. The popularity was mainly due to the high profiles of the founders. Prof. Kaplan was a professor of Harvard Business School, and Norton was a prominent management consultant working with Prof. Kaplan. A number of Fortune 500 companies have been using it as a performance measurement. The firms showed satisfying results in terms of increased revenues and net income. In light of the tremendous success of the first implementation of the balanced scorecard, in 1996 Kaplan and Norton (1996) also claimed that the balanced scorecard could motivate employees better to achieve the firm's goal, because it translates clearly the firm's vision to practical strategies so that all employees could understand the firm's ultimate goal and be part of it. Therefore, the balanced scorecard is considered as a tool for motivating employees.

## 1.2 Problems and Prospects

The object of this study is a business entity in Indonesia and how it uses the balanced scorecard to motivate its employees. The balanced scorecard is a relatively new approach to evaluating performance. As founders of the balanced scorecard, Kaplan and Norton (1996) claimed that the card is able to motivate people in the organization to perform in alliance with the organization's goals.

While conventional performance measurements concentrate on the financial perspective only, the balanced scorecard is designed to measure the firm from four different perspectives: financial, customer, business process, and learning & growth. The balanced scorecard is based on the firm's ultimate vision, and therefore its strategies reflect the visions of the organization's leader. It is then cascaded down to all employees. With the aid of this card, the learning organization members are informed of the organization's goals. The card aims to help members feel that they are part of the larger plan, and it aims to increase their motivation to help the organization reach its goals.

The constructs of motivation constitute a central element when going through the process of achieving goals. Motivational process and even constructs in Indonesia maybe different from those in the west, due to its distinctive culture. Hofstede (2001) found that there is a higher level of inequality of power and wealth within the Indonesian society than in the western world. Moreover, in contrast to the western individualism, the Indonesian society is considered collectivist; the people have a close long term commitment to certain groups. Loyalty is considered of fundamental importance in the society. Hofstede also discovered similar conditions in other Asian countries such as China and Japan. This circumstance is accepted widely as part of the Asian cultural heritage and is likely to affect the people's motivational constructs.

There is no research yet to confirm the balanced scorecard's effectiveness in motivating employees in Asian or Indonesian firms. Therefore, this study is conducted to provide such exploratory evidence, along with evidence on how motivational constructs are built in Asia, particularly in Indonesia.

### 1.3 Purpose of the Study

The purpose of this study is to seek evidence on how, in an Indonesian business setting, the balanced scorecard might effectively enhance employees' motivation. According to Kaplan and Norton (1996), the ultimate objective of the balanced scorecard measurement system is to motivate all managers and employees to implement successfully the unit's business strategy. The information in the balanced scorecard aims to increase each individual's understanding of the organization's strategy and to enhance motivation to achieve strategic objectives. Moreover, considering the uniqueness of the cultural heritage in Asia, specifically Indonesia, this study aims to describe how motivation is constructed in the business world, particularly in the cultural context of Asia, and specifically Indonesia.

### 1.4 Scope and Limitation of the Study

The study will be carried out in a firm in Indonesia, PT IMT. The design will be a *longitudinal quasi experimental design*. IMT, a prominent automotive company in



Jakarta, Indonesia, will be the subject of the study. IMT seeks the best solutions for its business. At the time of the research, this company was planning to implement the balanced scorecard as a tool to motivate its employees to reach the company's goals. The target group members will be 97 middle level managers of IMT. Their main job is marketing and selling cars. Their motivational styles before and after the implementation of the balanced scorecard will be identified and compared. At the beginning and the end of the research, questionnaires seeking subjective information on motivation will be completed by the respondents. The results are expected to show whether the balanced scorecard effectively motivates people and how motivational constructs are employed. The results of the study will reflect the behaviour and attitude of the people within the IMT organization in Jakarta, Indonesia. However, it is assumed that a similar pattern is likely to exist in other firms in Indonesia as well as in other Asian countries.

## 1.5 Organization of the Study

After this introduction chapter in which I have explained the purpose of the study as a whole and its significance, in chapter two I will be reviewing the literature in order to locate my work in the broader context of research on motivation. Chapter three provides a review of the balanced scorecard as a work evaluation tool for motivating people. I will also be providing a critical review of relevant studies which have analyzed similar topics. Then in chapter four, I shall propose a

research methodology and design which presents a case study of one company in the form of a longitudinal quasi experimental design. In chapter five, I will report data on respondents' responses in motivating factors in Indonesian business setting, and the impact of the balanced scorecard in motivation. Chapter six will discuss whether there is a relationship between motivation, cognitive ability, and performance. I will also analyze and discuss these results and show how they relate to the theoretical background in chapter two. Chapter seven will conclude and summarize the results and I will discuss implications for further research.

## 1.6 Contribution of the Study

In this study the following questions will be answered in the context of a large industrial company in Indonesia:

- 1. What are the motivational drivers in an Indonesian company?**
- 2. Does implementation of the balanced scorecard significantly and effectively enhance the employees' motivation?**
- 3. Is there any association between motivation, level of cognitive ability, and performance in the Indonesian cultural context?**

The conclusions aim to contribute to understanding of how motivational constructs and performance measurement techniques help an organization in Indonesia to develop effectiveness in the organization. From this study, it is hoped

that academics and professionals may obtain further knowledge on how to motivate people in the Indonesian and Asian workplace.

## **Chapter Two**

### **Theoretical Background and Literature Review 1: Motivation Constructs in Indonesia**

#### **2.1 Definition of Motivation**

The word ‘motivation’ was originally derived from the Latin word ‘*movere*,’ which means ‘to move’. Different social scientists have adopted diverse definitions of motivation and approaches to studying it. Atkinson (1964, in Steer and Porter, 1991, p.5) described motivation as the “contemporary influence on the direction, vigor, and persistence of action.” Jones (1955, in Steer and Porter, 1991) illustrated motivation in terms of

“how behaviour gets started, is energized, is sustained, is directed, is stopped, and what kind of subjective reaction is present in the organism while all this is going on” (p.5).

Vroom (1964, in Steer and Porter, 1991) addressed motivation as “a process governing choice made by persons or lower organisms among alternative forms of voluntary activity” (p.5).

Campbell and Pritchard (1976, in Steer and Porter, 1991) believed that motivation has to do with



“a set of independent and dependent relationships that explain the direction, amplitude, and persistence of an individual’s behaviour, holding constant the effects of aptitude, skill, and understanding of the task, and the constraints operating in the environment” (p.5).

Covington (1998) argues that motivation is the mixture of cognitive (or rational) processes and emotions (such as shame and pride).

## **2.2 Approaches to Motivation Theory**

- **Instinct Approach**

The earliest approaches to motivation were instinct theories developed by McDougal (1908, in Steer and Porter, 1991). He believed that “motivation comes from an innate, inherited instinct driving a person’s behaviour” (p.9). Thus, a major factor in human motivation was seen as a result of forces unknown even to the individual. This approach attracted widespread criticism.

- **Drive theories**

One of the prominent approaches countering the instinct approach was Hull’s drive theory (1943, in Steer and Porter, 1991). According to Hull, “behaviour or effort or motivation did not merely come from unconscious instincts; it was a function of ‘drive’ and ‘habit’” (p.11). Later in 1952, Hull (1952) added ‘incentive’ as another important variable determining effort or motivation.



- **Cognitive Approach**

Whereas Hull's drive theory viewed behaviour as a function of what had happened to the organization in the past, Lewin (1938), Tolman (1959), and Atkinson and McClelland (1958) developed a cognitive approach that viewed motivation as a kind of future pleasure-seeking. The cognitive approach places emphasises on a cognitive perspective, how individuals think about themselves and their environmental context. Atkinson (1964) believed that behaviour was a function of the characteristics of a person interacting with the characteristics of the person's situation. Characteristics of the person can include skills, knowledge, self-image, traits, background, and motives. Characteristics of a situation include urgency, the environment itself, and demands being made. Atkinson's formula suggests that we can control the people, or we can control the situation, though in practice the latter may be easier.

- **Attribution Theories**

Current approaches to motivation are derived from attribution theory, which assumes that people attribute causes to events and these attributions affect their subsequent behaviour. People assign explanations about why things have happened. Two important types of attributions are internal and external attribution. An internal attribution assigns causality to factors

within the person. It claims that the person is directly responsible for the event. By contrast, an external attribution claims that some outside thing motivated the event. It assigns causality to an outside agent or force. This theory is based upon the basic assumption that people always seek answers to why things happen. According to Covington (1998), when an event occurs, a person would ask himself 'Why?' when the thing that happened was considered important in his culture and would therefore affect him. Subsequently, he provides an attribution. The person's future behaviour depends on the type of attribution.

Assuming we can control the attributions people make, then we can influence their future behaviour. Weiner (1992) believed that people see the causes of their success or failure on a range of dimensions such as stable-unstable, internal-external, controllable-uncontrollable, and global-specific, leading to intended-unintended consequences. In practice, Weiner argued that attributing success or failure to stable causes such as ability is less likely to enhance performance than attributing them to less stable causes such as effort. Nicholls (1989) claimed that not all people see ability as something stable. Some students adopt an incremental approach, viewing ability as something that can be enhanced by effort or practice. Dweck's (1986) concept of learned helplessness is essentially an attributional approach to learning difficulties. Students who attribute their failure on a task to lack of ability are more likely to give up and make no further effort. Meanwhile, mastery oriented students look for explanations

or attributions which will help them to overcome the problem they have experienced. Covington (1998) argues that self perceived ability is central to students' motivation, but he emphasises the importance students attach to maintaining their sense of self-worth. He argues that "people sometimes adopt self-handicapping strategies which enable them to attribute failure on a high status task to factors which do not impute lack of ability" (p.10). Self-handicapping involves the creation of some impediment to one's performance, so that the individual has a ready excuse for potential failure.

- **Entity Theory vs. Incremental Theory of Personality in Motivation**

Research by Dweck and her associates (Dweck, Chiu, and Hong, 1995; Dweck, Hong, and Chiu, 1993; Dweck and Leggett, 1988; Erdley and Dweck, 1993) has identified two implicit theories of personality that predict inferential practices in person perception: entity and incremental theory.

"Entity theory assumes that an individual's personal attributes are fixed entities that cannot be changed. Incremental theory assumes that the qualities of a person are not fixed but malleable" (Dweck and Leggett, 1988, p.256).

Past research has shown that people who believe in fixed traits (entity theorists) tend to understand people and their behaviour in terms of traits, therefore they more likely to tend to make more dispositional inferences and attributions. Entity theorists eventually generate significantly more



global personality traits than do incremental theorists. Incremental theorists, in contrast, tend to generate more process-oriented, psychological-state explanations than do the entity theorists. Entity theorists believe motivational style is a fixed trait clinging to the person, whilst incremental theorists assume that motivational style is a product of process during one's life.

- **Psychological and Biological Drives in Motivation**

Motivational processes have long been of great interest to biologically-oriented psychologists and neuroscientists. A neurologist, Damasio (1994) used neurological case studies and laboratory experiments to argue for the role of motivation and emotion in our ability to make rational decisions and to function effectively. He also argued that “reasoning strategies revolve around goals, options for action, predictions of future outcomes, and plans for implementation of goals at varied time scales” (p.84). This kind of work shows that it is not just cognitive psychology, but also personality psychology, that can form a beneficial alliance with the new neuroscience approaches. Through such an alliance we can come to understand more about the ways affect and cognition interact and are brought to bear on goal-oriented behaviour. AimÉ *et.al* (2000) found that motivational styles were related to marital satisfaction. An even more interesting research result by Movius *et.al* (2004) found evidence that one's motivational style is influenced by the anatomy of one's body.

Specifically, they propose that *cardiac vagal tone* is a biological indicator of the ability to sustain attention and regulate emotion and it determines the person's motivational style.

## 2.3 Cultural Background of Indonesia

Indonesia is a former Dutch colonial territory, which gained its independence in 1945. It is an archipelago spread out between the Philippines, Malaysia, Singapore and Australia, and between the Indian Ocean and Atlantic Ocean. Its area is equal to the whole of Western Europe or the mainland USA. As of 2005, the population is approximately 208,200,000. About 59% of the population live on Jawa Island which consists of only 7% of the nation's land (data from the Indonesian National Statistics Agency, Biro Pusat Statistik, 2005). Moreover, most of the Jawa population stay or commute in Jakarta, the capital city. According to anthropologist Koentjaraningrat (1981), "there are 151 ethnic groups in Indonesia living under 33 areas of *adat* (traditional) law and speaking their own distinct native languages" (p.6). However, the national language, *Bahasa Indonesia* (the 'Indonesian language') is spoken by almost everybody since it is the language used in schools and universities. The culture and tradition are very complex and differ from one ethnic group to another. While Islam is the major religion, a mixture of all religions is practiced, resulting in some very unusual combinations. These ethnic

combinations are represented in the Jakarta population, as Jakarta is the most desired urban destination.

I am using Hofstede's (2001) dimensions in explaining the general background to Indonesia. He conducted a comprehensive study covering 74 countries in the world. He developed a model that identifies five primary dimensions to assist in differentiating cultures: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation.

#### ◇ Power Distance

Like most Asian parents, Indonesian parents and schoolteachers are generally authoritarian. Obedience is considered the most valuable virtue in a child. Being ambitious is regarded as an improper behaviour. In Indonesian language, the word 'ambitious' has a negative connotation. However, this does not mean that humility is valued. Most Indonesian parents, especially those of Chinese descent, actually demand their children to be the best in school and to do better than their peers. They tend to be overprotective towards their children, causing some children to fail to gain their independence. Moreover, parents will forbid their children to hang out with other children of different social classes. Social classes may be differentiated by wealth, ethnicities, or religions. Socio-economically, the higher classes (the Chinese, the Christians) have greater power than the lower class (the *Pribumi* /indigenous people, the Muslims).



This creates a deep gap in the power distance in Indonesian society.

Hofstede's (2001) dimension for power distance in Indonesia is 78. This is quite high compared to the average power distance for the greater Asian countries (71) and the rest of the world (55). This vividly illustrates a high level of inequality of power and wealth within the society.

#### ◇ Individualism

In Indonesia, the family is seen as more important than its individual members. The extended family has a very important role in making decisions. The influence of the extended family was even stronger in the past when people lived in the 'big house', a long house inhabited by the whole extended family consisting of three to four generations. These would include grandparents, uncles, aunts, nephews, nieces, children, and grandchildren; up to one hundred persons might live in a single house. In such houses; most decisions were made by the entire extended family with the senior members acting as leaders. In Jakarta today, in the era of globalization, the traditional family practices are becoming less conservative. However, most of the time, the extended family still makes the final decision. It is not surprising that, according Hofstede's (2001) study, Indonesia has one of the lowest world rankings for individualism with a rating of 14 (out of 100), compared to the greater Asian rank of 23, the world rank of 43, the USA rank of 91, and the UK rank of 89.

#### ◊ Masculinity

It may be unexpected that compared to other developing countries, the role of women in Indonesia is quite advanced. Even though the majority of Indonesian people adopt the patriarchal system of Islam, a certain ethnic group, the *Minangkabau*, implements a matrilineal system, where the mother is the dominant authority figure in the family. The female contribution to the work force is 33.0% (Biro Pusat Statistik, 2005), ranging from government officers, ministers, university professors, professionals, businesswomen, to blue collar workers. However, some conservative and religious groups still hold to traditional beliefs, emphasizing the domestic role of women irrespective of their level of education. Gender discrimination occurs in husband-wife relationships. Under the Marriage Law Act No. 1/1974, a husband is allowed to marry more than one woman, particularly when the wife is not able to conceive or she is terminally ill. This law represents the predominant religious attitude of Muslims toward women. As for Hofstede's (2001) masculinity dimension, Indonesia's is not very much different from the average masculinity dimension of the greater Asian's and the world average. Nevertheless, although the dimension rating might be the same, when it comes to marital affairs, the practice is considered quite different to those in western countries. The Indonesian Muslim men may marry up to four wives legally, while in the west polygamy is a misdemeanour.



#### ◇ Uncertainty Avoidance

In Indonesia, where the majority of the population are Muslims, both official Islamic laws and civil laws are imposed. The Islamic laws are mainly relevant to Muslims only, while the civil laws apply to both Muslims and non-Muslims. The majority of the non-Muslim society is of Chinese descent. “Although the Chinese Indonesian consists only of approximately 10% of the whole population, they control 80% of the economy” (Sarwono, 1997, p.11). Ethnic discrimination exists everywhere, from the top of government to street level. As a consequence, prejudice exists between the Chinese and the *pribumi*. The Chinese consider the *pribumi* as uncivilized, lazy, unproductive, and dependent. On the other hand, the *pribumi* think of the Chinese as arrogant, rich, opportunistic and lacking social concern. The peak of this discrimination was the atrocities against the Chinese in 1998. All over Jakarta, the *pribumi* looted the Chinese stores and houses, murdered and tortured the Chinese people, and raped Chinese girls. Discrimination does not happen only to the Chinese minority, but also to the Christian minority. Within the last decade, hundreds of churches around Indonesia have been burnt to ashes, and the government could not do anything to prevent it. Both Bali bombings were carried out by the *Pribumi* Muslim extremists. Moreover, bombs in western embassies in Jakarta were claimed as the *Pribumi*

Muslim's victory against non-Muslim. History tells us that these atrocities have happened in this country in the past as well. Consequently, in Indonesia, uncertainty is not something unusual. Business people always calculated 'uncertainty' along with 'possible corruption' as part of their costs. Official laws are often overpowered by 'street laws,' indicating a high level of tolerance for uncertainty. Surprisingly, Hofstede's (2001) ranking for Indonesia's uncertainty avoidance dimension is 48. Although this is lower than the greater Asian average of 58 and the world average of 64, the level is still considered quite moderate. This is mainly because Hofstede did his research in the 1970s, and violence in Indonesia has been increasing ever since. However, the above description describes conditions based on my own experience and observation as a Chinese Indonesian.

#### ◇ Long-Term Orientation

Hofstede (2001) added this dimension later on due to his observation of the Chinese people in Asia, who possess a high level of long-term orientation. In particular, the Chinese have long-term orientation. In Indonesia, the Chinese are extremely concerned about the education of their children; they send them to the best school they can afford. Meanwhile the *Pribumi* are less concerned about education. Moreover, considering the incessant social unrest and terror attacks, it can be assumed that the people of Indonesia as a whole do not have a long term

orientation. Their impulsive behaviour in the present does not reflect a long term orientation.

## **2.4 Ways of Understanding Motivation and Their Relevance in Indonesian Culture**

- **Instrumental Motivation:** It is assumed that instrumental rewards are a motivating source when individuals believe that the behaviours they engage in will lead to certain favourable outcomes, usually in terms of pay and praise. The basic assumption is that individuals and organizations comprise an exchange relationship. Expectancy and equity theories are currently accepted models of motivation based on exchange relationships. The work of Barnard (1938) first introduced the idea of instrumental motivation. Furthermore, Katz and Kahn (1978, p.15) proposed that “legal compliance and external rewards are bases of motivation,” while Etzioni (1975, in Steers and Porter, 1991) believed that “alienative and calculative involvement are roots of motivation. Instrumental motivation is widely thought to be universal, because humans innately desire favourable rewards” (p.209). In Indonesia, even though the power distance gap is deep, people definitely expect rewards for their good behaviour. However, this view underestimates the importance of intrinsic motivation.



- **Intrinsic Motivation:** The basic assumption is that individuals are motivated by intrinsic processes when they perform certain behaviour just because the behaviour is ‘motivating.’ Individuals enjoy the work and feel rewarded simply by performing the task. There are no external controls regulating the behaviour (deCharms, 1968) and behaviour that is challenging may be considered enjoyable to some people (Deci, 1975). The work of Herzberg *et. al* (1957) and Hackman & Oldham (1976) on job characteristics is representative of intrinsic process motivation. Herzberg *et. al* (1957, in Steers and Porter, 1991) believed that job design affected motivation. On the basis of his survey, Herzberg discovered that  
“employees tended to describe satisfying experiences in terms of factors that were intrinsic to the content of the job itself. These factors were called motivators and included such variables as achievement, recognition, the work itself, responsibility, advancement, and growth. Conversely, dissatisfying experiences, called hygiene factors, resulted largely from extrinsic, non-job-related factors, such as company policies, salary, co-worker relations, and supervisory styles” (p.260).  
Herzberg concluded that “satisfaction and motivation would occur only as a result of the use of motivators” (p.260). The implications of this model of employee motivation would be the ability to enhance motivation through job enrichment by creating basic changes in the nature of an employee’s job.

Similar to Herzberg, Turner and Lawrence (1965) with their requisite task attributes model, argued that an enriched job would lead to increased attendance and job satisfaction. A difference between Herzberg's and Turner and Lawrence's models lay in the inclusion of absenteeism as a dependent variable in Turner's.

Scott (1966) obtained findings supporting Herzberg's with his activation theory.

“Activation, defined as the degree of excitation in the brain stem reticular formation, had been found in laboratory experiments to have a curvilinear relationship to performance” (Scott, 1966, in Steers and Porter, 1991, p.261).

Scott's (1966) research had demonstrated that jobs that are dull or repetitive may lead to low level of performance because they fail to activate the brain. On the other hand, more varied jobs should lead to a state of activation with a resulting increase in performance.

Janssen *et al* (1999) proposed that “personal intrinsic work motivation was primarily determined by work content variables” (p.1360). Thus, there would be a logical relationship between work content variables and intrinsic personal work motivation.

Osteraker (1999) created a dynamic model for the application of existing motivational theories, based on needs. This model was created to describe “a suitable combination of values of the measured objects (employees in specific organizations) and motivational factors” (p.73). Osteraker’s dynamic model of motivation attempts to understand motivation in a dynamic way. It is considered as a framework of theories. One of the fundamental ideas of this model is that all employees are involved in all work processes. This is believed to enhance motivation of the employees.

“By accepting employees’ participation in the motivational processes and fostering dialog between top management and employees, the values within the organization are allowed to influence the whole motivational process” (Osteraker, 1999, p.75).

This model may work in Indonesia. Indonesia has the lowest rank on individualism on Hofstede’s dimension, as the Indonesian society is collectivist. Groups are more important than individuals. Therefore, collective job design emphasizing that the employees belong to a desired large organization may be motivating.

- **Motivation Based on Goal Internalization:** Kelman (1958, in Steers and Porter, 1991) believed that “behaviour is motivated by goal internalization when the individual adopts attitudes and behaviours because their content is congruent with their value system” (p.215). Katz and Kahn (1978) described this type of motivation as internalized values, and Etzioni



(1975) suggested a similar concept called ‘pure moral involvement.’

Becker (1992) and O’Reilly & Chatman (1986) have examined goal internalization as one dimension of organizational commitment. Latham and Locke (1979) described goal-setting as an effective motivational technique emphasizing the role of intentions or deliberate determinations to act, as major causes of motivated behaviour. If a person makes a commitment to an objective, it will strongly influence the subsequent behaviour of that person. The goals that seem to have the greatest positive effects on performance are those that are both specific and challenging. According to its founders, “the balanced scorecard provides an ideal framework for goal-setting for employees, because it is derived from the firm’s strategies” (Kaplan, 2000, p.6). It also fits the collective Indonesian society, where the goal of being part of a bigger group is so prominent.

Dweck (1996) uses goal analysis to detect and study coherent patterns of affect, cognition, and behaviour as she seeks to understand personality. She believes that “goals are variables that are highly contextually sensitive” (p.350). Thus, goals can help us understand when people will be similar and when they will be different. Dweck (1996) distinguishes goals based on classes.

“The first class of goals fall under the umbrella of achievement or competence goals. Here, two distinct classes of goals have been identified: *performance goals* and *learning goals*. Performance

goals aim to prove, validate, and obtain positive judgments of one's competence. Learning goals aim to improve one's competence, by understanding new things, mastering new tasks or acquiring new skills" (p.351).

Many researches have shown that the pursuit of the two classes of goals can have a very different character (Ames & Archer, 1988; Dweck & Elliott, 1983; Dweck & Leggett, 1988; Elliott & Dweck, 1988; Nicholls, 1984). When a performance goal, with its focus on measuring competence, is dominant (and particularly when expectancy of success is uncertain or low), individuals often avoid challenging tasks and are vulnerable to helpless responses to failure: attributions to lack of ability, lowered persistence and impaired problem-solving strategies. In contrast, when a learning goal is dominant, individuals are more likely to seek challenging learning opportunities and to display a mastery-oriented response to failure: a focus on effort or strategy, and maintenance of effective problem-solving strategies. When individuals are pursuing learning goals (the goal of increasing their competence), their level of confidence in their present ability is not important. They seek challenging tasks and pursue them in a mastery-oriented manner whether their confidence in their present ability is high or low.



Furthermore, Dweck (1996) sees the next class of goals as interpersonal and relationship goals. This view is consistent with Emmons (1989), Ford (1992), and McAdams (1985).

“Interpersonal goals strive for validation, whereas relationship goals focus on development. Interpersonal goals would include goals relating to seeking approval, acceptance, and liking.

Relationship goals or development goals would involve a focus on building relationships, and would include such things as seeking intimacy, helping others, seeking to improve one’s relationship skills” (Dweck, 1996, p.352).

Research by Dweck *et al* (1995) has shown that,

“in the achievement domain, approval goals are more likely to produce helpless reactions to rejection, whereas development goals are more likely to produce mastery-oriented responses (such as a focus on attributions to controllable factors, maintenance of positive affect, and increased self-disclosure” (p.283).

Other works such as Cantor *et al* (1991), Read *et al* (1989), Sanderson *et al* (1995), and Warren (2002) supported similar distinctions between these different types of relationship goals.

In contrast, Elliot *et al* (2005) in their study of three sites (Kentucky - USA, St. Petersburg - Russia, and Sunderland - England) found that high performance goals, high expectation and competitiveness may lead to high

academic performance. Elliot *et al* (2005) also found differences between the three countries in milieus, attitudes, beliefs and social systems, in relating to performance goals and educational performance. The situation in Indonesia might differ from all of them. In Indonesia, cultural pressures might encourage performance goals which would in turn be associated with helpless and self-worth motivational styles. This is because in a collectivist culture, people are likely to avoid challenging tasks, on which failure is likely. This could be problematic for a firm seeking to improve employees, performance, because learning goals are more likely to be associated with mastery orientation. Similarly interpersonal goals could lead to learned helplessness, whilst relationship or development goals should in theory lead to mastery orientation. The Indonesian people value validation from peers very highly, and therefore they tend to adopt performance goals since these are associated with efforts to maintain, or to raise, status within the society. Acceptance from the whole group is extremely important, more important than mastery in the task. An example is how easily the Muslim extremists influence some innocent Indonesians to perform terror attacks. They work through prominent groups in the society, and impose their destructive goals on the people. The 'reward' is being accepted in the group. Therefore, the Indonesian people tend to show signs of learned helpless and self worth responses. Looking at the country's severe economic condition and the low GDP, it would be easy to conclude that learned helplessness & self-worthiness are leading to bad

performance. However, not all Indonesians perform badly. Some are actually well educated, high performing people. Above all, Dodge *et al* (1989), Emmons (1989), and Peterson (1989) concluded that people might pursue many goals simultaneously, and it can be clearly argued that the Indonesians might be motivated by several goals at the same time. One might argue that learned helplessness is prevalent in Indonesian society, on the grounds that many individuals feel that they can do little or nothing to alter the situation. One might also argue that the self-worth motive is prevalent on the grounds that many individuals seek explanations for their current situation that absolve them from the need to improve their performance in that situation.

- **Motivation Based on Internal Self Concept:** Internal self concept motivation assumes that individuals set themselves internal standards that become the basis for the ideal self. When an individual is primarily inner-directed, he internally creates motivation based on his or her self-concept. The individual tends to use fixed standards of self measurement as he attempts to reinforce perceptions of competency, and achieve higher levels of competency. This need to achieve higher levels of competency is similar to what McClelland (1961) referred to as a high need for achievement. The motivating force for individuals who are inner-driven and motivated by their self concept is task feedback. For these individuals, their efforts are vital in achieving outcomes and their ideas and actions are



instrumental in performing a job well. This process is similar to Deci's (1975) idea of intrinsic motivation as "representing one's attempt to seek out and overcome challenges," (in Steers and Porter, 1991, p.48) and Katz and Kahn's (1978) idea of internalized motivation as self-expression derived from role performance. In Indonesia, the fixed standards used to generate motivation based on internal self concept might be religious beliefs.

- **Motivation Based on External Self Concept:** Self concept motivation is externally based when the individual is primarily other-directed. In this case, the ideal self is derived by adopting the role expectations of other reference groups. The individual attempts to meet the expectations of others by behaving in ways that will elicit social feedback consistent with self perceptions. When positive task feedback is obtained, the individual finds it necessary to communicate these results to members of the reference group. The individual behaves in ways which satisfy reference group members, first to gain acceptance, and after achieving that, to gain status. These two needs, for acceptance and status, are similar to McClelland's (1961) need for affiliation and need for power, and Dweck's (1996) interpersonal and relationship goals.

“Interpersonal goals would include goals relating to seeking approval, acceptance, and liking. Relationship goals or development goals would involve a focus on building

relationships, and would include such things as seeking intimacy, helping others, and seeking to improve one's relationship skills.

The individual continually strives to earn the acceptance and status of reference group members. This status orientation usually leads to an ordinal standard of self evaluation" (p.348).

This type of motivation is also similar to Etzioni's (1975) social moral involvement. This case is more likely to be found in Indonesia, where people seek recognition or approval. Yet motivating people through external validation is unstable. When the validation and acceptance diminish, the motivation also diminishes.

## **2.5 Motivation Constructs in Indonesian Business Setting**

According to Kelly's (1955) personal construct psychology, we live in two basic worlds, the world that exists outside of any human understanding, and the world which we interpret in our mind. We construct a framework based on our experiences. The main implication of this concept is that all constructions of 'reality', being human interpretations, must be relative rather than absolute and therefore must be subject to eventual revision or replacement. Kelly proposed a 'constructive alternativism philosophy', that explains how humans uniquely make sense of their experiences in the world. Kelly argued that there is no absolute truth in psychological theories. His view of human learning and its limitations clearly states that humans can learn only if their framework is designed to allow them to see all phenomena. In other words, Kelly's personal

construct psychology theory proposes that we must understand how other persons see their world and what meanings they attribute to things in order to effectively motivate them. Therefore, in motivating Indonesian employees in an Indonesian business setting, we must understand their framework first, in other words, what are their backgrounds, beliefs, expectations, attributions to motivation, and how they adapt to dissonance.

### **Cultural Background of Indonesia**

As discussed earlier, the Indonesian society is collectivist. It is constructed from a unique ethnic combination of 151 indigenous ethnic groups forming a large group of *Pribumi* (indigenous, native Indonesian), and the 'east alien,' mainly the Chinese. About 80% of the Indonesian economy is controlled by the Chinese minority which comprises only 10% of the Indonesian population (Sarwono, 1997). There is a wide gap in power distance. Gender discrimination in marital affairs exists due to the practice of Islamic laws. There is a very high uncertainty due to social unrest, and race and religious discrimination. Long term goal orientation seems not to be adopted by the majority. Investors and business professionals calculate all the risks affecting the country in their cost budget. Top management in big firms is usually of Chinese descent or western expatriates. Middle and low management are mainly the *Pribumi*. Blue collar workers are definitely *Pribumi*.

### **Belief and Expectation**



Since my study involves primarily *Pribumi* respondents, I will describe the *Pribumi*'s beliefs and expectations only. In Indonesia, the need for acceptance and validation by the group is very high. Striving for validation, '*gengsi*' (self-presentation) is the predominant behaviour of the Indonesian people. Being ambitious is not a good virtue, although silently deep down in their heart they have their own ambitions. The Indonesians 'perform' better within groups. Material rewards and emotional recognition are expected following 'good' performance. Performance goals are pursued over learning goals. The people value interpersonal goals striving for validation and approval, as well as relationship goals focusing on building relationships with others of the same social class.

Kaming *et.al.* (1998) found that Indonesian blue collar workers are most motivated by: fairness of pay, good relationship with workmates, overtime payment, bonus and good safety. These motivational drivers can be summarized into three: payment, good relationship, and good safety.

On top of all these expectations, religious Islamic belief is the main driver to unite individuals in groups. When it comes to defending their Islamic belief; money, power, and rational argument can not quench their sense of injustice.

### **Social conditions caused by beliefs and expectations**

Pride may combine with striving for validation to trigger corruption in Indonesian society. Citizens may put '*gengsi*' (self-presentation) as the most important thing to achieve, and they are willing to maintain their '*gengsi*' at

any cost. '*Gengsi*' can be translated as the appearance of increasing status, indicated in wealth, resulting in acceptance and validation by the society. The most important tool in maintaining '*gengsi*' is certainly money. People may not really care where the money comes from, as long as they can maintain their '*gengsi*.' Thus corruption is very common in Indonesia. The U.S. Embassy (2004) in Jakarta described Indonesia as the most corrupt country in Asia. In research conducted by the University of Indonesia (2001), it was found that bribes to the government bureaucracy increased total business costs by 10 percent. Frequent demands by government officers, called 'facilitation fees,' have to be fulfilled to obtain required permits or licenses. The term KKN (*Korupsi, Kolusi, Nepotisme* or Corruption, Collusion, Nepotism) is widely used to describe business conditions in Indonesia. In the minds of employees, promotion is based on loyalty and seniority, not work performance. Therefore, the *ABS* skill (*Asal Bapak Senang*, or How to keep the boss happy) is predominant.

'People power' is seen in the huge number of trade unions. Indonesia has over 72 registered trade union federations and roughly 16,000 company-level unions. Some union federations have political affiliations. The unions basically demand better payment and better facilities. In most of the unions, obedience to the Islamic laws is a must, in order to be accepted. Most companies find the unions annoying. They go on strike quite often, to demand increases in pay, or even to demonstrate their dislike of some top management officers.



Despite the demand for foreign investment, mistrust and dislike of westerners causes foreign western companies difficulties in obtaining and renewing necessary immigration permits for expatriate staff. This mistrust and dislike causes more serious and severe problems. Terrorism is quite common in Indonesia, forcing companies to increase the costs to cope with the uncertainty.

### **Motivation Constructs in Indonesian Business Settings**

Motivation constitutes a central element in optimizing firms' performance. Therefore, it becomes the aim of every successful firm to find factors enabling itself to motivate its employees to continuous learning and to take advantage of this knowledge to ensure its survival. Individual motivational behaviour can be seen as a choice process that is engaged to obtain feedback on traits, competencies or values. Based on Kelly's (1955) concept of personal construct psychology, the two basic influences in Indonesian business settings can be seen as: the beliefs and expectations of the people and the social and cultural condition they have created. These two basic influences can be seen as internal attributions arising from an individual's internal values and personality traits, and/ or external attributions arising from a response to situational forces, such as expectations or validation. Even though Kelly argued that there is no absolute truth in psychological theories, this approach might help to describe motivation constructs in Indonesian business settings.



Internal attributions within Indonesian employees include the innate '*gengsi*' (self-presentation first) behaviour of the Indonesian people with weak self-concept. External attributions include expectation for validation by the big group or the elders, or the need to keep the elders pleased. Indonesians are motivated by both internal and external attributions to varying degrees.

Generally, they are more 'outer directed', easily influenced by their peers and elders. Therefore they tend to adopt ordinal rather than fixed standards. People adopting ordinal standards tie their behaviour with ordinal or un-fixed factors external to themselves. Thus their behaviour is unstable, depending on features external to them, over which they feel little control. They are highly competitive, even though they do not admit it explicitly, and self presentation (*gengsi*) is important. A major concern for them is establishing blame when failure occurs or establishing credit for group successes. They are status and power oriented with a strong need for external or social affirmation. Many adopt a self-worth motivational style. Based on Kaming's (1998) study, there are at least three motivational drivers in Indonesia; good payment, good relationship with workmates, and good safety. Therefore, the best inducements for Indonesians would be financial reward, and managerial and social inducements.

***Reward Inducements.*** From a self concept perspective, reward provides a very potent form of social feedback. It tends to reinforce one's perception of competencies and provides an important source of status. There is a wide

array of types of rewards that can be obtained in organizational settings, ranging from pay, fringe benefits, promotion, praise, autonomy, and feelings of accomplishments and competency. Steers and Porter (1991) categorized these rewards into two major dimensions: intrinsic/extrinsic and system-wide/individual. Intrinsic rewards are good feeling that the individual gives himself or herself as a result of performing some task. Extrinsic rewards are provided to the individual by someone else. System-wide rewards are those that are provided by the organization to everyone in a broad category of employees. Individual rewards are provided to particular individuals but not to all individuals in a category. Steer and Porter combined the two dimensions to categorize particular types of rewards as follows:

	Systemwide	Individual
Extrinsic	Example: Insurance benefits	Example: Large merit increase
Intrinsic	Example: Pride in being part of a winning organization	Example: Feeling of self-fulfillment

Table 2.1 Categorization of Rewards  
Source: Steers, R.M., Porter, L.W. (1991) *Motivation and Work Behaviour*, New York: McGraw-Hill, Inc.

The motivational properties of reward systems are often thought to lie in the expectation that increased effort will lead to greater reward. However, in Indonesia, the case is slightly different, as Indonesians tend to link position and status to reward rather than increased efforts. In Indonesia, status determines pay. Therefore, generally Indonesians are more motivated to pursue both hedonistic and concrete goals. Dweck (1996) identifies goals as



hedonic and concrete. “Hedonic goals focus on pleasure and pain whilst concrete goals focus on concrete rewards and punishments” (p.349). Both focus on rewards. There are quite a number of studies with examples of ‘impulsive’ behaviour driven by a focus on rewards that might explain the corruption in Indonesian society (Newman, 1987; Wallace *et al.*, 1991). There is also compelling research on the negative correlates of working for extrinsic rewards as a characteristic style (Harter *et al.*, 1992; Kasser *et al.*, 1993). Deci *et al* (1985) manipulated the extrinsic and intrinsic rewards in their study, and showed the undermining effects of working only for extrinsic rewards.

Lorsch (1987) argued that “an effective reward system should be designed to fit well with the other design features of the organization as well as with its business strategy” (p.55). It is impossible to design an effective reward system without knowing how other features of the organization are arrayed. Decisions about the reward system should be made in an interactive fashion: shaped by the business strategy, tentative reward-system design choices would then be tested against how other features of the organization are being designed. This is why Kaplan and Norton (2004) proposed that the best reward system would be the balanced scorecard, for its design is based on the firm’s strategies.

In Indonesia, intrinsic rewards as a motivational driver include maintaining ‘*gengsi*’ (self-presentation) leading to acceptance by the big group and leaders. Extrinsic rewards are mainly in terms of money.



***Managerial Inducements.*** Management aims to energize, direct, and sustain behaviour through a number of sources. In Indonesia, the most effective leadership style may be socio-emotional as it provides an important source of social feedback. This type of leadership is especially effective with other-directed individuals such as Indonesians, who value peer approval above all. Transactional leadership style which is based on exchange relationships is also applicable to and utilized by Indonesians as they are primarily instrumentally motivated. Transformational leadership style motivates by appealing to the values and interests of the organization that have been internalized by the employees. This may also appeal to Indonesians, as long as the leaders are able to extend their influence towards the employees in the first place. In contrast, a task leadership style which provides inner-directed individuals with important task feedback regarding traits, competencies, and values may not be so effective in Indonesia, as it does not fulfil the cultural expectations for money and peer approval.

***Social Inducements.*** Most Indonesians are other-directed, and therefore social inducement might work very well in Indonesia. With regard to the self concept, individuals are motivated to demonstrate the traits, competencies, and values which are important to the work group. Moreover, instrumentally-motivated Indonesians respond to norms and sanctions enforced by the work

group or organization or by peers. These norms and sanctions provide both rewards and punishments that direct and sustain behaviour.

***Task Inducements.*** The task design literature points to autonomy, task significance, feedback, task identity, and skill variety as attributes of the task that impact on motivation. Hackman & Oldham (1976) claim that

“work redesign provides a strategy for enhancing internal work motivation. The individual does the work because it interests or challenges him/her. In terms of the self concept, the degree of autonomy would affect an individual’s opportunity to attribute outcomes to his/her traits, competencies and values” (p.278).

Task inducement may influence Indonesians under some conditions, when it provides social feedback, not only task feedback. Task feedback is a necessary ingredient in reinforcement or affirmation of self perception, and one’s ability to identify with a task would affect how important that feedback is to an individual’s self concept.

## **2.6 Motivational Style Adoption**

Motivation theories are important in understanding how people may achieve better performance. There are some beliefs that might hinder the process of motivation. On average, many students believe that ability and intelligence are fixed and therefore they cannot be changed through hard work. For educators,

it would take extra efforts to motivate these learners. Nicholls (1984) argues that

“not all learners see ability as something which cannot be changed. In contrast to a fixed capacity or entity view of ability, some learners adopt an incremental approach, viewing ability as something which can be raised by further effort or practice. Young children are more likely to believe that ability can be improved. As they grow older, particularly in adolescence, they become more likely to regard ability both as unchangeable and as an explanation for their performance level” (p.330).

Nicholls distinguished between students who are:

- ◇ Task orientated, concentrating on the task itself rather than on performance in relation to others (this is similar to mastery orientation)
- ◇ Ego orientated, with a preoccupation about their performance in relation to others
- ◇ Work avoidance orientated, perhaps as a self-protective strategy.

Dweck (2001) extends Seligman’s (1975) theory of learned helplessness to provide essentially an attributional approach to learning difficulties. Dweck implies that learners who attribute their failure on a task to lack of ability are likely to give up and make no further effort. In contrast, there are individual learners that look for explanations which will help them to overcome the problem they have experienced. Covington (1998) also sees self-perceived ability as central to students’ motivation, but he emphasizes the importance students attach to maintaining their sense of self-worth. He argues that in



western countries, ability is seen as being of overriding importance. People adopt strategies which enable them to attribute failure on a high status task to factors which do not impute lack of ability. In general society there is a pervasive tendency to equate accomplishment with human value. Therefore, Covington argues that students often confuse ability with worth.

“There is compelling evidence that students value ability, sometimes above all else. Students prefer low-effort explanations for failure over low-ability explanations. This makes sense not only because low ability is predictive of future failure, but also because failure does not necessarily imply low ability, if one has not tried. Correspondingly, in the case of success, high-ability explanations are preferred over high effort explanations. However, successes achieved without much effort is valued even more, indicating once again that a reputation for brilliance is of paramount importance to a positive self-definition” (Covington, 1998, p.53).

## **Chapter Three**

### **Theoretical Background and Literature Review 2:**

#### **Balanced Scorecard**

##### **3.1. The Balance Scorecard**

The balanced scorecard was first developed as a result of a one-year multi-company study ‘Measuring Performance in the Organization of the Future,’ carried out by the Nolan Norton Institute in 1990. David Norton, CEO of Nolan Norton, served as the study leader with Robert Kaplan, Professor of Leadership at the Harvard Business School, as the academic consultant (Kaplan and Norton, 1996). In the past, firms have sought to simplify performance measures by adopting multi-unit organizational designs, decentralizing operational decisions to individual business units, and holding business units accountable mainly for bottom-line financial results.

“Traditional performance measurement systems have been criticized as being too narrowly focused on financial figures and functional level performance so that they often fail to capture the long-term business success of the organization. The balanced scorecard complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from an organization’s vision and strategy. The balanced

scorecard may contain a mixture of 15 to 25 financial and non-financial measurements, grouped into four perspectives:

- a. *Customer perspective*: how customers see the company
  - b. *Internal perspective*: what the company excels at
  - c. *Innovation and learning perspective*: how the company continues to improve and be creative
  - d. *Financial perspective*: how the company looks to shareholders”
- (Kaplan and Norton, 1996, p.14-15).

These four perspectives provide the framework for the balanced scorecard.

Since the balanced scorecard is derived from the company strategies, it is more than a measurement system. According to Kaplan and Norton (1996),

“a balanced scorecard is a management system that allows the company to:

- clarify and gain consensus about strategies
- communicate strategies throughout the organization
- align departmental and personal goals to the strategy
- link strategic objectives to long-term targets and annual budgets
- identify and align strategic initiatives
- perform periodic and systematic strategic reviews, and
- obtain feedback to learn about and improve strategies” (p.16).



Moreover, in their subsequent study, Kaplan and Norton (2000) stated that a balanced scorecard should not only be derived from the organization's strategy, it should also be transparent in how it influences the strategy. It should tell the story of the business strategy. This story is told by linking outcome measures (lagging indicators) and performance driver measures (leading indicators). They assumed that the linkage contained a series of cause-and-effect relationships. The outcome measures tend to be lagging indicators that signal the ultimate objectives of the strategy and whether near-term efforts have led to desirable outcomes. The performance driver measures are leading indicators, which signal to all organizational participants what they should be doing today to create value in the future. Outcome measures without performance drivers create ambiguity about how outcomes are to be achieved, and may lead to sub-optimal short-term actions. Performance drivers that are not linked to outcome measures will encourage local improvement programs that may deliver neither short nor long term value to the firm. A good balanced scorecard should tell the story of the strategy so well that the strategy can be inferred by the collection of objectives and measures and the linkages among them. In their recent study, Kaplan and Norton (2003) found that before the implementation of balanced scorecard only 5 per cent of the average workforce understands corporate strategy. The percentage increase varied within firms. The basic premise behind the balanced scorecard is quite simple: measurement motivates. Even if there are no incentives tied to the achievement of a particular goal, the simple measurement of it will make people pay attention. What makes the balanced

scorecard different from other measurement systems is that it ties the measurement system to the company's strategy. The measurements in the balanced scorecard are describing the company's strategy as a whole.

## **Components of Balanced Scorecard**

### *Financial perspective:*

The balanced scorecard puts the most weight (usually from 40% to 60%) on financial measurements. This perspective explains how the company looks to shareholders. In building a balanced scorecard, financial objectives should be linked to corporate strategy. Financial objectives can differ considerably at each stage of a business life cycle.

- A company in a growth stage might set a revenue growth strategy, focusing on growth. The financial objectives in this stage would be: the percentage growth rates in revenues and sales growth rates.
- In the sustain stage, a company might measure its financial performance by looking at the return on investment, return on capital employed, or economic value added. At this stage it would be focusing on asset utilization / investment strategy.
- Should the company want to harvest the investment made in the two earlier stages, the best strategy would be cost reduction / productivity improvement, and the overall financial objectives would be maximization of operating cash flow and reduction in working capital requirements.

### *Customer Perspective*

This perspective explains how the customers see the company as a whole.

First, the management should have a clear idea of the company's targeted customers and business segments. Then, managers identify what the targeted customers value, and choose the value proposition they will deliver to these customers. The ultimate objective would not only be meeting customers' expectations, but also exceeding them, and creating satisfaction that the customers never think of. According to Sim & Koh (2001),

“there are three classes of attributes that may be used to assess measurements of customer perspective: product and service attributes, customer relationship, and image and reputation. By selecting specific objectives and measures across these three classes, managers can focus their organization on delivering a superior value proposition to their targeted customer segments” (p.20).

### *Internal Business Process Perspective*

In the internal business process perspective, managers identify the critical internal processes at which they must excel if they are to meet the objectives of shareholders and of targeted customer segments. There are at least three processes measured in this perspective:

- Innovation processes in the forms of research and development processes that yield new products, services and markets.



- The operation processes that identify the cost, quality, time, and performance characteristics enabling the company to deliver superior products and services to its targeted customers.
- The post-sale service processes that enable the firm to feature important aspects of service that occur after the purchases, product or service has been delivered to the customers.

### *Learning and Growth Perspective*

Ultimately, the ability to meet ambitious targets for financial, customer, and internal business process objectives depends on the firm's capabilities of learning and growth. The enablers for learning and growth come primarily from three sources: employees, systems, and organizational alignment. Objectives and measures for these enablers of superior performance in the future should be an integral part of the balanced scorecard.

### **Measurements in the Balanced Scorecard**

Effective measurement applications use metrics that are tuned specifically to the unique features of an association's programs and strategic priorities. Here are some examples of metrics in balanced scorecard categories, proposed by Paul Niven (2002), a consultant using the balanced scorecard with his clients. He discovered these examples during his many experiences consulting firms in Europe.

#### *“Financial Measures*

- Membership market penetration in traditional segments
- Growth in new member segments
- Account share of member spending by key products
- Frequency and dollar value of cross selling
- Output per employee or value-added
- Contributions per donor
- Grants by size, sources, number

#### *Satisfaction Drivers*

- Relevance of publications to business or professional interests
- Fitness of codes and standards to market practices
- Online and in-person networking opportunities
- Cooperation with related professions on significant issues
- Impact on federal and state public policy decisions
- Education opportunities that address verified needs

#### *Process Measures*

- Time to fulfil an order, process a new member application, acknowledge a contribution
- Press releases picked up by publications that members read
- Member response rates to legislative alerts
- General ledger errors
- Frequency with which deadlines are (not) met

### *Innovation, Learning, and Growth*

- Alignment of competencies with process requirements
- Alignment of information-system capabilities with process requirements
- Annual investment in employee development
- Employee satisfaction with involvement in decisions affecting their work; recognition for good work; access to sufficient information to do the job; and active encouragement to be creative and use initiative” (Niven, 2002, p.55).

### **Development of the Balanced Scorecard**

In further studies, Kaplan and Norton (2000) found evidence that strategy-focused organizations implementing the balanced scorecard were able to overcome weaknesses of the traditional measurement and management systems and build management systems based on strategy. They were able to succeed where so many others had failed because they understood the cause-and-effect linkages of the strategy. They were able to see the leading indicators of strategic change and were able to motivate their organizations to focus on the strategy. These companies were called strategy-focused organizations because they implemented the strategy-focused organization. Furthermore, they explain strategy focused organizations as organizations that made strategy the central



organization agenda, created sharp focus on the strategy, and mobilized their employees to act in fundamentally different ways, guided by the strategy.

Examples of these organizations were: the City of Charlotte, ABB Switzerland, Cigna Insurance, and Mobil Oil (Now Exxon Mobil). They all were able to turn their organizations around by using the balanced scorecard.

Moreover, Kaplan and Norton (2000) suggested some steps that are necessary to take in developing and implementing the balanced scorecard within strategy-focused organization:

*Mobilize change through executive leadership.* Breakthrough results are the result of a clear strategy, execution and leadership. To drive change, executives must develop a case for change and a vision and strategy for the goal of the organization.

*Translate the strategy into operational terms.* The balanced scorecard and strategy map translate the corporate strategy into terms that the organization can understand and act upon. A critical part of this step in the process is determining the key objectives, measures, targets and initiatives to drive the strategy. The balanced scorecard is developed based on strategic mapping.

*Strategy balances contradictory forces.* A good strategy should balance and articulate the short term and long term financial objectives. For example, when investing in assets for long-term revenue growth conflicts with cutting costs for short-term financial performance, a good strategy should find a balanced solution on this contradiction.

*Strategy is based on a differentiated customer value proposition.* A good strategy should determine who the targeted customers are, and the value proposition required to please them. Examples of value propositions and customer strategies that might please the customers are:

- Low total cost
- Product leadership
- Complete customer solutions
- System lock-in

*Value is created through internal business processes.* The financial and customer perspectives in strategy maps and balanced scorecards describe the outcomes that the organization hopes to achieve. Processes in the internal and learning and growth perspectives drive the strategy. They describe how the organization will implement its strategy.

*Strategy consists of simultaneous, complementary themes.* A good strategy should form a synergy that delivers benefits for the firm with no time constraints. Improvements in operational processes generally deliver short-term results through cost-savings and quality enhancements. Benefits from an enhanced customer relationship might start to phase in six to twelve months after the initial improvement in customer management processes. Innovation processes might take even longer to produce higher customer revenues and operating margins.

*Strategy alignment determines the value of intangible assets.* The fourth perspective of the balanced scorecard strategy map, learning and growth, describes the organization's intangible assets and their roles in the strategy.

Intangible assets can be classified into three categories:

- Human capital: employees' skills, talents, and knowledge
- Information capital: databases, information systems, networks, and technology infrastructures
- Organization capital: culture, leadership, employee alignment, teamwork, and knowledge management

Chart 3.1 is an example of strategy mapping within strategy-focused organization



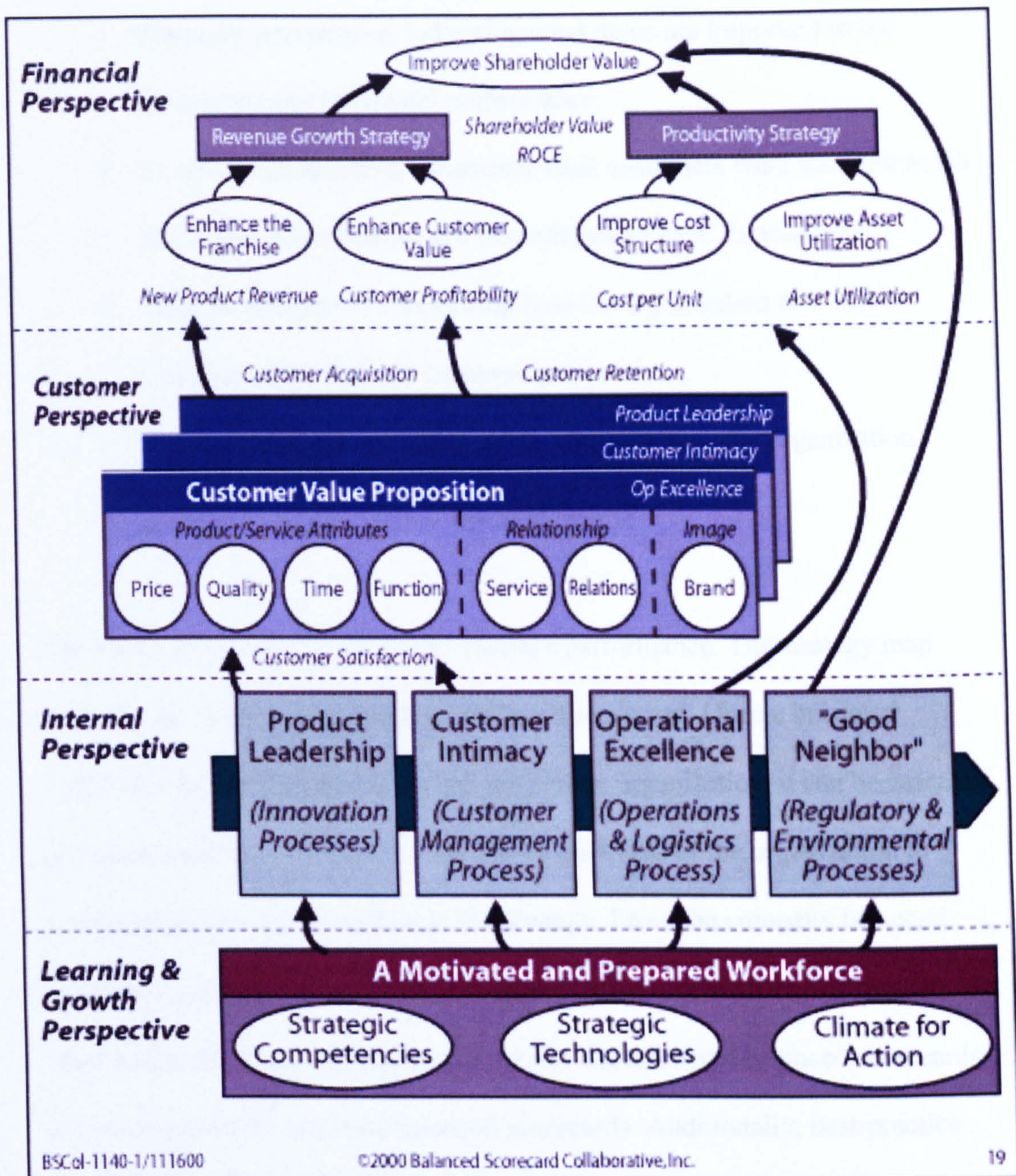


Chart.3.1 Strategy mapping within strategy-focused organization.  
Source: Balanced Scorecard Collaboration, 2000

*Align the organization to the strategy by developing balanced scorecard:*

When the strategic mapping has been produced, based on the strategy map, a balanced scorecard describing the company's ultimate goals is prepared.

There are four perspectives in the balanced scorecard:



- Financial perspective; indicating what items are important in the measurement of financial performance.
- Customer perspective; measuring what customers want and how much the organization fulfils (and exceeds) customers' expectations
- Internal perspective; measuring how the organization as a whole improves financial and customer perspective.
- Learning and growth perspective; verifying how the organization prepared itself to achieve the goals above.

The balanced scorecard is a tool to measure performance. The strategy map provides the basis for the company balanced scorecard. Once a balanced scorecard has been created at the top level of an organization, it can be cascaded to operating and support units. This allows each area of the organization to understand how they contribute to the strategy. From the company balanced scorecard, the departmental balanced scorecards can be derived. To measure the personal performance of each employee, the departmental balanced scorecards are used to provide personal balanced scorecards. Additionally, best-practice organizations have worked to develop external alignment with customers and partner balanced scorecards. Many boards are now working to roll out the balanced scorecard to understand the entire enterprise.

*Make strategy everyone's job.* While strategy may be formulated from the rear, it is executed at the front lines. Therefore, communication and education are

critical to executing strategy. Aligning incentives and personal objectives is also critical for success. Leading organizations are also developing personal balanced scorecards to further link the personal development process to the strategic management process.

*Make strategy a continual process.* One key feature of the balanced scorecard is that it allows strategy to happen continually, not just at an annual strategy review session. Monthly or quarterly management meetings focus on the strategy as opposed to the operations. Linking business intelligence systems, linking the balanced scorecard to planning and budgeting systems, and best practice and knowledge management systems are critical to developing an organization that continually reviews strategy.

While Kaplan and Norton did not specifically address whether the development of the balanced scorecard is based on top-down or bottom-up approaches, it is implicitly shown that in developing the balanced scorecard, both approaches might be used. In establishing and confirming the company's vision and missions, breaking the vision and missions into strategies, and identifying the critical success factors, both top-down and bottom-up approaches might be used, depending on the type of the firm and the priorities of the management. Cascading the company's balanced scorecard into departmental and individual scorecards, a top-down approach is used.



## 3.2 Critiques of the Balanced Scorecard

**Cause-and-effect relationship assumed.** Kaplan and Norton (1996) assume the following causal relationship:

*“measures of organizational learning and growth → measures of internal business processes → measures of the customers’ perspective → financial measures”* (p.31).

The measures of organizational learning and growth are the drivers of the measures of the internal business processes. The measures of these processes are in turn the drivers of the measures of the customer perspective, while these measures are the drivers of the financial measures. Thus, Kaplan and Norton translated strategy into a set of hypotheses about cause and effect. The assumption that there is a cause-and-effect relationship is essential because it allows the measurements in non-financial areas to be used to predict future financial performance. Kaplan & Norton (1996) claim that the balanced scorecard can solve the problem of accounting data, as it contains financial and non financial measures that cannot be described by historical accounting data only. Financial measures say something about past performance while non-financial measures are the drivers of future performance. However, Norreklit (2000) argued that the validity of the balanced scorecard relies on the assumption that the cause-and-effect relationship exists between the areas of measurement suggested. Kaplan and Norton’s (1996) description of cause-and-effect relationships among measures of the four perspectives is problematic, because of the following:

### *The time dimension*

Norreklit (2000) argued that

“a cause-and-effect relationship requires a time lag between cause and effect, but the time dimension is not part of the scorecard. It measures cause and effect at the same time without considering any time lag; it has no time dimension. The effect of the measures will occur at different points of time because the effects of the different areas involve different time scales” (p.67).

While the introduction of more efficient processes may yield more satisfied customers within a short period, innovation may not affect the financial results until a much longer time. The effect of some efforts will be almost immediate and that of others very slow. Moreover, Schoenfeld (1991) argued that

“measuring the effect of an action related to new and complex activities is particularly problematic since it is difficult or impossible to establish performance measures for activities with which the organization has no or very little experience” (p.91).

### *The relationship between measures*

The relationship between measures on the balanced scorecard is ambiguous. On the one hand, Kaplan and Norton (1996) claim causality: “a financial result is necessarily occurring if a given cause exists” (p.71). On the other hand, they also argue that “actions have to be assessed on the basis of financial reasoning,

the use of activity-based costing being aimed at ensuring that given activities are financially profitable” (p.71). Relationships between learning and growth, efficient internal business processes, a high level of customer satisfaction, and resulting good financial results need to be demonstrated scientifically and statistically. The assumed relationships are unproven.

Kaplan and Norton (1996) assume a positive relationship between level of satisfaction, customer loyalty and long term financial performance. However, they do not provide information showing how strong the trend is, and whether it holds for all customers and all firms. They ignore the fact that some loyal customers might not bring profit to the firm, for example, the kind of customers who are loyal, but placing small orders and buying customized products at low prices. Loyal customers may even be a problem if they are elderly customers.

The lack of causality between quality and financial results is confirmed by Ittner and Larcker (1998). They stated that

“fewer than 55 percent of the vice presidents in charge of quality in major U.S. firms could directly relate their quality measures to operational, productivity or revenue improvements, only 29 percent could relate them to accounting returns, and no more than 12 percent could relate them to stock return. This is remarkable in view of the fact that 75 percent of them felt pressure to demonstrate the financial consequences of their quality initiatives” (p.281).



Norreklit (2003) argued that the cause-and-effect relationship may also be criticized on the basis of a neo-classical economic analysis.

“The consequence of a high level of customer satisfaction leading to a solid financial result would be that the optimal price is not optimal since a price which is lower than the optimal price would yield a higher level of customer satisfaction than the optimal price. The reason for this is that in neo-classical economics the price which the customer is willing to pay for a product expresses the utility of the product to the customer and hence the value of the product to the customer. From a neo-classical perspective, the relationship between customer satisfaction and financial results is a logical one and not a cause-and-effect relationship. Business economics assumes that a transaction will only take place if the value to the customer is higher than the price and if the firm’s marginal costs are lower than its marginal revenue” (p.67).

Therefore, the balanced scorecard is based on assumptions that may not be valid, and consequently its expected effect may not exist.

A counter-argument to the above reasoning might be that the model is a short-term one. A firm may set a non-optimal price and create a higher level of satisfaction in the short term, while building an image and a market share in the long term. The image may improve the utility to customers, and the market share may make it possible for the firm to reduce its costs, so the firm may cut

its short-term earnings in order to increase long-term earnings. However, in order to assess whether this is profitable, it is still necessary to use a financial calculus. The profitability is neither a necessary outcome nor a highly probable one.

The above analysis shows that the balanced scorecard may make invalid assumptions about causal relationships, leading to the anticipation of performance indicators which are faulty.

#### *The interdependence of the four perspectives*

In practice, the four perspectives in the balanced scorecard are interdependent. Donaldson (1984) argued that

“The influence between measures is not unidirectional in the sense that learning and growth are the drivers of internal business processes, which are the drivers of customer satisfaction, which in turn is the driver of financial results” (p. 60).

The development process, for example, depends on the financial results; the possibility of providing the capital needed for the necessary investments being limited by unsatisfactory financial results. In order to be able to invest in research and development, firms need satisfactory financial results, but they likewise need research and development in order to be able to produce satisfactory financial results. The reasoning is circular. Therefore, “instead of a

cause-and-effect relationship, the relationship between the areas is more likely to be one of interdependence” (Donaldson, 1984, p.65).

### *Cause-and-effect vs. Finality Relationship*

On the basis of the above analyses, we may conclude that the causality claimed to hold between perspectives is problematic. Kaplan and Norton (1996) themselves are theoretically unclear about the issue, arguing both for a logical and a causal relationship.

“A possible counter-argument against the assumption that a causal relationship is involved is that Kaplan and Norton have a different conception of cause-and-effect relationships. It might be assumed that in fact they intend to refer to finality relationships” (Norreklit, 2003, p.87).

“A finality relationship occurs when human actions, wishes and views are related to each other. A finality relationship is involved when:

- i. a person believes a given action to be the best means to an end; and
- ii. the end and this view actually cause the action”

(Follesdal *et al.*, 1997, p. 170).

A satisfactory financial result may be obtained by first supplying a good product at low prices, making customers very satisfied and gaining a market share and an image, and then later reducing the level of satisfaction by raising prices.

According to Norreklit (2003), claiming finality is more ambiguous than invoking causality.



“A finality relationship does not assume the existence of a general law from which it follows that actions will lead to good financial results.

Assessing financial consequences requires a financial calculus. There are indeed indications that Kaplan and Norton want to refer to finality and not to causality. Yet if they are assuming finality instead of causality, then the balanced scorecard is no different from many other approaches” (Norreklit, 2003, p.87).

Altogether, the power of the instrument to make statements and to serve the purposes of management control will be greatly reduced.

*Balanced scorecard is based on empiricism.* Kaplan and Norton (1996) refer to their case studies which are highly complex. The complexity indicates a gap between the empirical world and the theory developed in the balanced scorecard. “The seriousness of the gap may of course in part be the result of insufficient attention being paid to how to translate the empirical world of case studies into theory” (Norreklit, 2003, p.88).

*Top-down control.* Swedish investigations (Olive *et al.*, 1997) have shown that when the scorecard fails, some of the essential barriers to its becoming a success are a lack of any firm rooting in the management and the players. Kaplan and Norton never explicitly specified their approach in developing the balanced scorecard, but in the substance of cascading the company’s balanced scorecard into departmental and individual scorecards, a top-down approach is used. This

top-down approach points to another problematic area of the balanced scorecard: the relationship with internal stakeholders. To be effective, the model has to be rooted in the management and throughout the organization, and therefore in formulating strategy and identifying the key success factors, a bottom-up approach might be more effective. The management needs to contribute resources but the project needs to be understood and accepted at all levels of the organization if the scorecard is to be successfully implemented. However, this might be difficult in Indonesia, since top-down control is considered the most effective approach for a collectivist society. It may be difficult to get the scorecard accepted by the employees, but when the top management initiates the scorecard, it may work well.

### **3.3. Development of the Balanced Scorecard at IMT**

The best way to explain clearly how to develop a balanced scorecard is by looking at examples. The example below describes the process of developing a balance scorecard set for IMT, Jakarta, Indonesia. The company was considering implementation of the balanced scorecard as a tool to monitor and motivate employees. The management first looked for evidence of success stories from implementing the balanced scorecard. Mobil Oil (now Exxon Mobil) leaped from last to first in profitability within its sector of industry from 1993 to 1995, a rank it maintained for the next four years. Cigna Insurance was losing \$1 million a day in 1993, but after implementing the balanced scorecard, within two years it was in the top quartile of profitability in its industry. Then in



1998 it spun off a \$3.5 billion division. These companies attributed part of the success to having implemented the Balanced Scorecard (Berkman, 2002). IMT decided to attempt to copy their successes by developing its own balanced scorecard.

The process of planning and designing the balanced scorecard at IMT began in January 2002. Through many long and exhausting meetings and discussions with the management, the tool was completed by November 2002. Starting from January 2003, the balanced scorecard pilot project was implemented at IMT. My contribution to this pilot project had two parts. The first was the design and implementation of the BSC at IMT. This is mainly described in the rest of this chapter, though reference to it is also made in subsequent chapters. The second was to evaluate the implementation of the BSC. The methodology and procedures for that are described in chapter 4. Based on my agreement with the management of IMT, before and after the implementation of the balanced scorecard, I conducted this study by asking the respondents to fill out questionnaires, conducting focus groups, interviewing and testing them with the critical reasoning tests.

### **Translating the strategy into operational terms**

First of all, a unique strategy map describing all the strategies and goals of IMT was developed. The design of this strategy map was a result of a series of meetings and discussions among the top management of IMT. The essence of the strategy map was to describe the firm's overall strategies in a chart



understood by all members of IMT. The first stage was determining the ultimate goal of the organization; optimizing the economic value added (EVA). The top management chose EVA over “profit maximization” because EVA was considered more than merely income or profit. Whilst in calculating profit, we only subtract the cost of debt, in determining the economic value added, we also consider the cost of equity, thus the overall cost of capital of the firm (Young & Byrne, 2001). As a metric, EVA equals net operating profit minus appropriate capital charges. EVA is not an abstract measure. It can be obtained with this formula:

$$\text{EVA} = (<\text{Net Operating Profit After Taxes} / \text{Net Assets}> - \text{weighted average cost of capital}) \times \text{Invested Capital}.$$

Thus, EVA describes the effectiveness of the assets utilization compared to the profitability of the firm. Simply put, when managers employ capital, they have to pay for it, explains Gregory Milano, partner and management committee member in the EVA consulting practice of North America at Stern Stewart & Co., the New York City-based developer and promoter of EVA. By assessing a charge for the use of capital, EVA encourages managers to monitor assets as well as income, and keeps them aware of the trade-offs between the two. Conflicting and confusing goals (like revenue growth, market share or cash flow) are replaced with a single financial measure for all activities. Evidence from a study by Fatemi *et.al* (2003) suggests that top managers are not only stimulated to increase the EVA of the firm, but also rewarded for current and

past additions to market value added (MVA). Achieving long-term superior wealth creation for owners is accomplished by linking top manager pay to the economic value created in the current period. With EVA as the ultimate goal, there will be no resentment within employees, as they are aware that it is a fair measurement in identifying efficiency and effectiveness of assets and capital utilization. Therefore, EVA is a powerful tool for motivating the management. In achieving this ultimate goal, two dimensions were used to depict the detailed plan; the balanced scorecard perspectives and the organization strategies. There were four departmental strategies portrayed in four perspectives. The revenue growth strategy, productivity strategy, financial strategy, and human resources strategy were described from four different perspectives; the financial, customer, internal, and learning & growth perspectives. Each objective in the strategy map is connected to one another. They work together to create synergy. With this strategy map, all members of IMT were expected to understand the whole picture of where the firm was heading. Chart 3.2 below describes the strategy mapping of IMT.



## Strategy Map of Indomobil Multi Trada

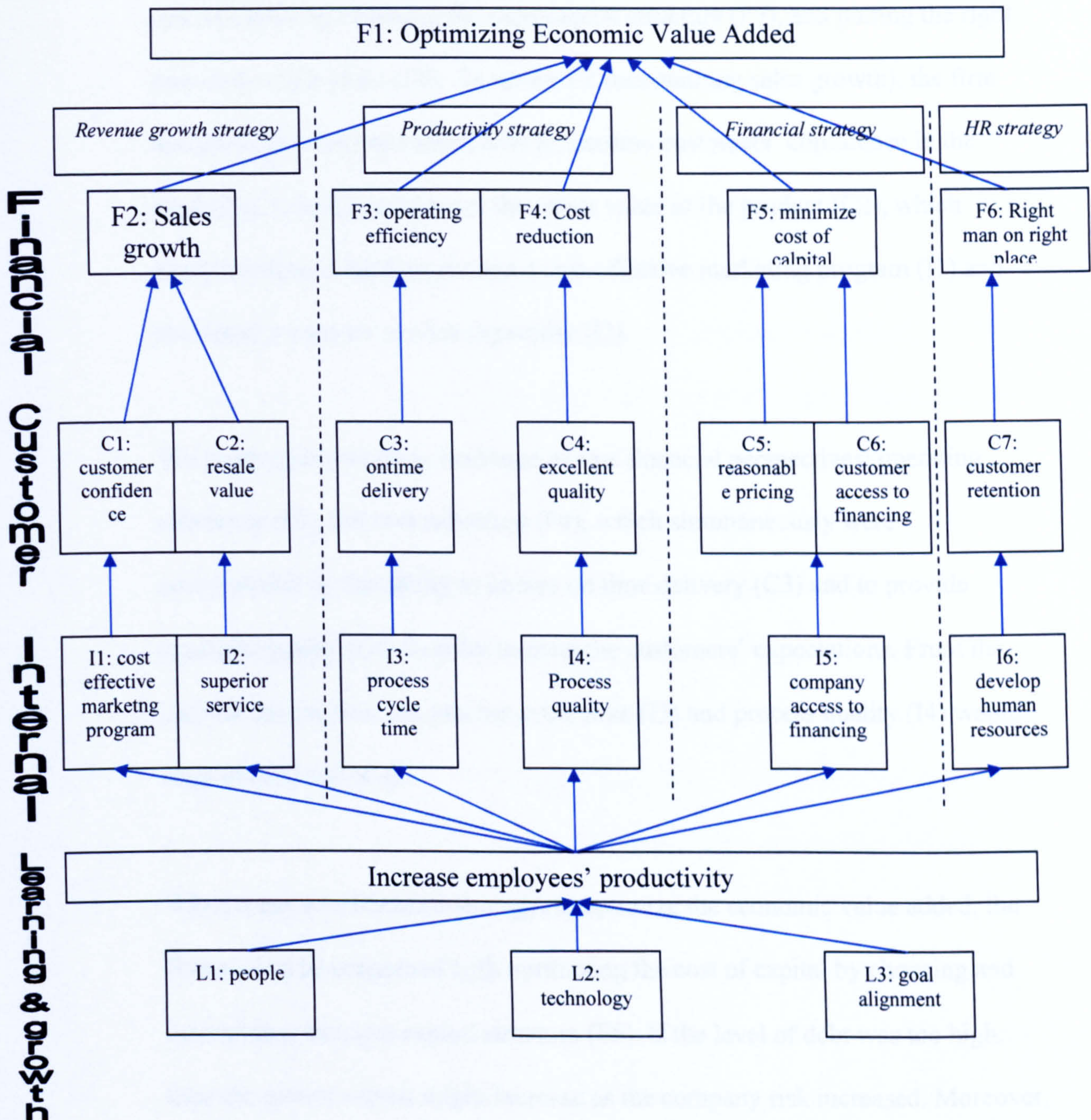


Chart 3.2. Strategy map of Indomobil Multi Trada  
Source: Internal data, PT Indomobil Multi Trada

In order to optimize the economic value added at IMT, the firm needed to pay attention to at least five different financial strategies: maintaining sales growth



(F2), improving operating efficiency (F3), reducing costs (F4), minimizing the cost of capital by choosing the right capital structure (F5), and putting the right man in the right place (F6). To assure F2 (maintaining sales growth), the firm needed to be concerned about how to increase customers' confidence in the product (C1) and how to boost the resale value of the product (C2), which would be done if the firm created a cost-effective marketing program (I1) and possessed a superior service capability (I2).

The productivity strategy consisted of two financial perspectives: operating efficiency (F3) and cost reduction (F4), which simultaneously were accompanied by the ability to ensure on time delivery (C3) and to provide excellent quality (C4) in order to meet the customers' expectations. From the internal perspective, the process cycle time (I3) and process quality (I4) would support (C3) and (C4).

When it came to financial strategy, to optimize the economic value added, the firm should be concerned with optimizing the cost of capital by choosing and maintaining the right capital structure (F5). If the level of debt was too high, then the cost of capital might increase as the company risk increased. Moreover, if debt level was too low, then the firm used too much equity to finance its operation. Generally cost of equity is higher than cost of debt. Therefore, the firm's cost of capital would not be in an optimized condition. From the customer perspective, cost of capital was translated into reasonable pricing (C5)

and customers' access to financial resources in order to gain the ability to purchase the product (C6). The company should possess easy access to financial sources as well (I5).

The human resources strategy mainly focused on how to place the right people in the right place so that the firm operated efficiently (F6). Customer retention approaches were also considered to increase the customers' satisfaction (C7). Internally, the firm should continuously find ways to develop human resources to satisfy customers (I6).

As in the learning and growth perspectives, the company decided to focus on three main priorities; *the people*; how to develop selling and strategic skills (L1), *technology*; how to gain leveraged knowledge (L2), and *culture*; aligning the company's objectives and personal goals (L3). The learning and growth perspective aimed to support and increase employees' productivity which impacts on the internal, customer, and financial perspectives. The most intriguing part in establishing measurements would be in the learning and growth perspective. In measuring how people develop selling and strategic skill (L1), there were three indicators; the numbers of strategic and marketing innovations, the numbers of management training sessions and the percentage of employees with core skills. These indicators were quantitatively obtained. The critical point is to determine the criteria of strategic and marketing innovation, and the kinds of skills considered to be core skills. The company determined

that to be considered a strategic and marketing innovation, a course of action should be able to demonstrate earning generating capability. Core skills were regarded as skills needed to achieve the ultimate goal of the firm. In measuring how the employees gain leveraged knowledge through technology (L2), the numbers of best practices transferred was counted. This too was rather difficult to obtain, as the definition of best practice stated by the firm was any practice leading to earning generating capability. The simplest measurement in the learning and growth perspective would be how to measure the alignment between the company's objectives and personal goals (L3). It was measured by the rate of employee retention, assuming that a high employee retention rate indicated high alignment.

Each measurement in the strategy map was linked to each other and all of them formed a map describing the overall strategy of the firm.

### **Aligning the organization to the strategy**

After the strategic mapping was ready, based on the strategy map, the management and I developed a balanced scorecard describing the company's ultimate goals.

There were four sections in the balanced scorecard:

- Section F: Financial perspective; indicating what items are important in the measurement of financial performance.



- Section C: Customer perspective; measuring what customers want and how much the organization fulfils (and exceeds) customers' expectations
- Section I: Internal perspective; measuring how the organization as a whole improves financial and customer perspective.
- Section L: Learning and growth perspective; verifying how the organization prepares itself to achieve the goals above.

### *Company balanced scorecard*

The company balanced scorecard was derived straight from the strategy map. It described the company strategies as a whole.

Table 3.1 below is the final draft of IMT company balanced scorecard.

# PT INDOMOBIL MULTI TRADA COMPANY BALANCED SCORECARD

BALANCED SCORECARD						
Strategic Measures:		Bench-	Actual	Result	Weight	RP X
		Mark		Pfmnc		Weight
F1	Increase in Economic Value Added (in %)	5	-	-	10%	-
F2	Market share (in %)	40	-	-	10%	-
F3	Inventory turn over (in times)	10	-	-	5%	-
F4	Profit margin per unit product (in %)	40	-	-	5%	-
F5	Rate of return - cost of capital (in %)	10	-	-	5%	-
F6	Percentage of profit to salary expenses (in %)	500	-	-	5%	-
C1	Survey on customer confidence (in %)	100	-	-	5%	-
C2	% of Resale value of 1-year product to new product	100	-	-	5%	-
C3	% of On time delivery	100	-	-	5%	-
C4	% of Customer satisfaction on quality	100	-	-	2%	-
C5	% of Customer expectation on pricing	100	-	-	2%	-
C6	% of Customers using financing provided by co.	100	-	-	2%	-
C7	Number of repeated customers (in persons)	250	-	-	4%	-
I1	Percentage of revenue to marketing expenses	1,000	-	-	5%	-
I2	Percentage of service dept. to marketing dept.	15	-	-	3%	-
I3	% of prompt process cycle time	100	-	-	5%	-
I4	% of production with no re-work	100	-	-	5%	-
L1.1	Numbers of strategic & marketing innovations	10	-	-	5%	-
L1.2	Numbers of management trainings	10	-	-	3%	-
L1.3	% of employees with core skills	100	-	-	5%	-
L2	Numbers of best practices transferred	5	-	-	2%	-
L3	Rate of employee retention	95	-	-	2%	-
Total weight					100%	-
	<b>Result performance:</b>					
	Actual = bench mark ==>	100				
	Actual > bench mark ==>	More than 100				
	Actual < bench mark ==>	less than 100				

Table 3.1. Company balanced scorecard of IMT  
Source: Internal data, PT Indomobil Multi Trada

Each perspective had its own weight, and these weights varied among companies, depending on the management's judgement. For IMT, the financial



perspective was weighted 40%, the customer 25%, the internal business 18% and the learning and growth perspective 17%. The company's performance was rated based on these weights. The benchmark used was the industrial average and the management's past experience.

### *Departmental balanced scorecard*

After the firm's balanced scorecard was ready and understood by all members within the organization, then I started to develop the departmental balanced scorecards. The departmental balanced scorecard described the responsibilities of each department in contributing to the company's goals. They were derived from the company's targets. Each department was responsible for certain measurements in the balanced scorecard. Table 3.2 below describes which measurement(s) were assigned to each department, and how one measurement could be assigned to several departments, creating collective responsibility and requiring effective collaboration between departments.

# PT INDOMOBIL MULTI TRADA

## Departmental BALANCED SCORECARD

		Marketing	Production	Finance	HRD
F1	Increase in Economic Value Added (in %)	V	V	V	V
F2	Market share (in %)	V			
F3	Inventory turn over (in times)	V	V	V	
F4	Profit margin per unit product (in %)	V	V		
F5	Rate of return – cost of capital (in %)	V	V	V	
F6	Percentage of profit to salary expenses (in %)	V	V	V	V
C1	Survey on customer confidence (in %)	V	V		V
C2	% of Resale value of 1-year product to new product	V		V	
C3	% of On time delivery	V	V		V
C4	% of Customer satisfaction on quality	V	V		V
C5	% of Customer expectation on pricing	V		V	
C6	% of Customers using financing provided by co.	V		V	
C7.1	Number of repeated customers (in persons)	V	V	V	V
C7.2	Time w/ customers (average in hour/yr per person)	V			
I1	Percentage of revenue to marketing expenses	V			V
I2	Percentage of service dept. to marketing dept.	V			V
I3	% of prompt process cycle time	V	V		V
I4	% of production with no re-work		V		V
L1.1	Numbers of strategic & marketing innovations	V	V	V	V
L1.2	Numbers of management trainings				V
L1.3	% of employees with core skills				V
L2	Numbers of best practices transferred	V	V	V	V
L3	Rate of employee retention	V	V	V	V

Table 3.2. Departmental Balanced scorecard of IMT  
Source: Internal data, PT Indomobil Multi Trada

All departments have to work together toward the ultimate goal. Take the F1 measurement, for example. In increasing the economic value added, each department was responsible according to their own expertise. Thus, the marketing department was responsible in increasing the EVA through expanding the market share (F2), maintaining the level of inventory turn over (F3), increasing the profit margin (F4), increasing the rate of return (F5), and maximizing profit (F6). The production department was responsible for



managing the inventory level so that inventory turn over would increase (F3). The finance department contributed in keeping the level of weighted average cost of capital as low as possible in the (F5) measurement. The HRD department was responsible for maintaining the salary level at a fair rate so that it would benefit both the firm and the employees. The departmental balanced scorecards were the basis for developing personal balanced scorecards for each person in IMT.

#### *Personal balanced scorecard*

A personal balanced scorecard reminds and guides each member of the firm on the company's goals and targets. The idea behind the development of personal balanced scorecards was to enhance each employee's knowledge about IMT as a firm, and to motivate them to perform their best. It was hoped that every time they saw this personal scorecard, they would feel a part of IMT and therefore be more motivated. In my study, the respondents were all members of the sales force. The personal balanced scorecard for the sales force can be seen in Table 3.3 below.

**PT INDOMOBIL MULTI TRADA**  
**Personal BALANCED SCORECARD**  
**Sales Force**

Name: \_\_\_\_\_  
NIP: \_\_\_\_\_

Strategic Measures:		Bench-	Actual	Result	Weight	RP X
		Mark		Pfmnc		Weight
Financial perspective:						
Identification of revenue item that you could affect						
PF1	Number of sales in a month (in unit)	5	-	-	40%	-
PF2	Average profit margin per unit sold (in %)	40	-	-	10%	-
Customer perspective:						
Recognition of what customers want						
PC1	Survey on customer confidence (in %)	100	-	-	5%	-
PC2	% of On time delivery	100	-	-	10%	-
PC3	% of Customers using financing provided by co.	100	-	-	5%	-
PC4	Number of repeated customers (in persons)	5	-	-	10%	-
Internal perspective:						
How to improve financial and customer performance						
PI1	% of prompt process cycle time	100	-	-	5%	-
PI2	% of production with no re-work	100	-	-	5%	-
Learning and growth perspective:						
Personal development to meet your objectives above						
PL1	Numbers of strategic & marketing innovations	1	-	-	5%	-
PL2	Numbers of management trainings	1	-	-	5%	-
Total weight					100%	-
Result performance:						
Actual = bench mark ==>		100				
Actual > bench mark ==>		more than 100				
Actual < bench mark ==>		Less than 100				

*Table 3.3 Personal balanced scorecard of IMT*  
*Source: Internal data, PT Indomobil Multi Trada*

The fundamental principle underlying the balanced scorecard was: “If you can measure it, you can manage it” (Kaplan & Norton, 1996, p. 21). Therefore each item in the scorecard should be able to be measured. In the personal balanced



scorecard in IMT, all performance measurements for each item are quantifiable. All performance measurements are summed up to identify the 'performance score' of each employee. The measurement system and the resources of the measurements are as follows.

- PF1 and PF2 are revealed in the accounting records
- PC1, PC2, PC3, PC4 are derived from the sales order forms, that contain the name of the sales force, how long it took to fulfil an order, what financial company the customer uses (if applicable), and whether this customer was a repeated customer.
- PI1 and PI2 are shown in the sales order forms as well.
- PL1 and PL2 are completed by the supervisor who has a record of the employees' innovativeness and willingness to learn beyond their duties.

### **Example of measuring process**

One respondent (respondent number R84) sold seven vehicles (Actual PF1 = 7) in the month of December 2003. Average profit margin from his sales was 40% (Actual PF2 = 40%). On the customer survey sheet, AS got a full complement (Actual PC1 = 100%). He also succeeded to manage all deliveries on time to customers (Actual PC2 = 100%). Only 1 of the 7 customers were using company's financing through Indomobil Finance, Inc (Actual PC3 = 14.29%). Of the 7 customers, 6 were new customers, so AS only got one repeated customer (Actual PC4 = 1). AS promptly followed the internal procedures in processing his customers' orders (Actual PI1 = 100%). All his seven orders

were delivered without re-work (Actual PI2 = 100%). In that month, AS did not make any strategic nor marketing innovation. (Actual PL1 = 0). However, he did go to the BSC training (Actual PL2 = 1). The process of evaluation was as follows. The result performance was a product of the actual performance compared to the bench mark. In this example, for item PF1, the result performance was  $[(7/5) \times 100\% = 140\%]$ . Since the weight given for PF1 was 40%, then the final [RP x weight] was  $[140 \times 40\% = 56]$ . All items were calculated in the same way. The sum of [RP x weight] indicated the score that AS got in his personal balanced scorecard. In this case, he got 98.71 for his December 2003 performance. His yearly performance was the mean of his monthly performances. Table 3.4 below demonstrates the actual personal balanced scorecard of AS for the month of December 2003.



**PT INDOMOBIL MULTI TRADA**  
**Personal BALANCED SCORECARD**  
**Sales Force**

Name: AS

NIP: XXXXX

**December 2003**

Strategic Measures:		Bench- Mark	Actual	Result Pfmnc	Weight	<i>RP X Weight</i>
Financial perspective:						
Identification of revenue item that you could affect						
PF1	Number of sales in a month (in unit)	5	7	140	40%	56
PF2	Average profit margin per unit sold (in %)	40	40	100	10%	10
Customer perspective:						
Recognition of what customers want						
PC1	Survey on customer confidence (in %)	100	100	100	5%	5
PC2	% of On time delivery	100	100	100	10%	10
PC3	% of Customers using financing provided by co.	100	14.2857	14.2857	5%	0.71429
PC4	Number of repeated customers (in persons)	5	1	20	10%	2
Internal perspective:						
How to improve financial and customer performance						
PI1	% of prompt process cycle time	100	100	100	5%	5
PI2	% of production with no re-work	100	100	100	5%	5
Learning and growth perspective:						
Personal development to meet your objectives above						
PL1	Numbers of strategic & marketing innovations	1	0	0	5%	0
PL2	Numbers of management trainings	1	1	100	5%	5
Total weight					100%	98.7143
Result performance:						
	Actual = bench mark ==>	100				
	Actual > bench mark ==>	more than 100				
	Actual < bench mark ==>	Less than 100				

Table 3.4 Example of Personal balanced scorecard of IMT  
Source: Internal data, PT Indomobil Multi Trada

### **Preparing the information technology (IT) support**

In order to effectively measure performance in the balanced scorecard, an IT support system was required. The management and I modified the firm's accounting software, enabling it to calculate and show all the necessary measurements needed as listed in the balanced scorecard. This process was done internally and we did not find any major problem.

### **Introducing the balanced scorecard to employees**

Subsequent to the design of the personal balanced scorecard and the IT supporting preparation, the management and I introduced this performance measurement tool to my respondents, the sales force.

#### **Stages in introducing the balanced scorecard**

- I conducted a workshop for all members of the sales force, introducing the new tool to measure their performance.
- I performed group training for supervisors only (they were not my respondents). The goal of this group training was mainly to let the supervisors learn how to gather measurement data for evaluating performance and how to understand and interpret the measurement results.
- I conducted a panel discussion. The panelists were top management (one director), supervisor (one sales manager), two top-ranking sales persons (my respondents), and myself. The two top-ranking sales persons were included



because one of the aims of the balanced scorecard was to increase sales.

The participants were all members of the sales force (my respondents). My aim for this panel discussion was to know how far my respondents grasped the concept of the balanced scorecard and their readiness in implementing it. The final result of this discussion was satisfying, as generally all of them seemed to understand this new performance measurement tool.

### **Implementing the balanced scorecard**

The following additional steps were taken in implementing the balanced scorecard:

- I established a support center for the implementation of the balanced scorecard. The members of the support center were the sales manager, the marketing manager, and the marketing director. The three of them were supposed to handle questions and queries related to the balanced scorecard from the sales force, my respondents.
- I conducted ongoing supervision and conducted two focus groups; one was held before the BSC implementation and one after. I also interviewed twenty three respondents to gain their perceptions on motivation and the implementation of the balanced scorecard.

For this pilot project, the results on the balanced scorecard were not tied to the employees' salary and bonuses. Soon after the respondents received their first performance evaluation based on the balanced scorecard, I initiated my next

step in this study, to discover the impact of balanced scorecard implementation on motivation. In January 2004, the management of IMT started evaluating the 2003 annual sales force's performance using the balanced scorecard pilot project without tying their performance with economic rewards. IMT did start to tie the balanced scorecard's performance to the management's compensation plan and bonuses later, after the pilot project. In January 2005, the company started to link the economic rewards with the 2004 BSC performance.

### **3.4. Issues in Developing Balanced Scorecard at IMT**

#### *Anticipated limitation of the balanced scorecard in the context of IMT*

The personal balanced scorecard is merely measuring items that are quantifiable. It can not measure the specific quality of an employee, and it does not explain the unique situation surrounding the workplace. Most of the measurements are not controllable by only one person. For example, 'on time delivery' might involve the marketing personnel as well as the production people. It is not quite fair if a prompt sales person has to suffer from the failure in 'on time delivery' caused by a certain production personnel. A similar problem might occur when a customer refuses to use financing provided by the company. This does not mean that the sales person is 'underperforming.' The customer might prefer to pay cash or he might already have another finance company in mind.

#### *Motivational impact of the balanced scorecard at IMT*



Consequently, the balanced scorecard might have a negative motivational impact as well as a positive one. It depends on the circumstances when the measurements take place. The balanced scorecard might be motivating in a positive way when all departments work in the same pace and quality. On the other hand, it might frustrate some excellent employees when their supporting colleagues do not operate at the same level of quality. The frustration might lead to de-motivation. Considering the diversity of the Indonesian population, where some groups are more motivated than others, this de-motivation possibility might be important.

### **3.5. Conclusions**

The balanced scorecard is a potentially useful tool for measuring performance. As no tool is perfect, it has flaws as pointed by scholars. Nevertheless, this tool has been found to be effective in western countries, especially in the United States where the founders have been implementing it. However, it is not yet clear whether it would have similar success in eastern countries, particularly Indonesia. Differences in values, milieus, environment, educational levels should be taken into consideration. Therefore, this study attempts to seek such evidence.

### 3.6. Related Previous Studies

Numerous variables may influence the success of a management initiative. For example, Veroff *et al.* (1980) investigated the effect of a gap of 20 years. They measured the achievement, power, and affiliation motives of random samples of American adults in 1957 and again in 1976. Their analysis of the results suggested that disturbing changes had taken place in American men. There was a decrease in men's affiliation motivation, but no change in their achievement motivation. Women were more achievement-motivated in 1976 than they were in 1957, a finding to be expected as a result of the women's liberation movement. Both men's and women's fears of power motivation increased. This reflects increased fear of being controlled by others, a need for autonomy. Veroff's study is interesting because the independent variable is *time*. Within the range of approximately 20 years, motivation changed.

Using daily reports from people working on creative projects within organizations, Mueller *et al.* (2000) obtained longitudinal measures of perceived time pressure, motivation, affect, and actual incidents of creative thinking. Time pressure had a negative effect on creative thinking on both the time-pressured day and the following day. This suggests that a good tool should enable the users to manage their time effectively.

A tool that works in one country or region is not necessarily applicable in other countries or regions. Van de Vliert and Janssen (2002) conducted a 42-nation



regression study, based on indicators of aggregated performance motivation, work satisfaction, life satisfaction, and subjective well-being, and showed that the independence of the two performance motives and the motivation-satisfaction links also held across countries. They found that “the positive self-referenced motivation-satisfaction link and the negative other-referenced motivation-satisfaction link are more pronounced across countries with higher levels of income, education, and life expectancy.” Thus, motivational methods that work well in one region may not be easily transferable to other regions.

Lockwood *et al* (2002) demonstrated that individuals are motivated by role models who encourage strategies that fit their concerns. However, they did not discuss how motivational styles might change.

A study by Kasurinen (2002) tried to determine the impact of implementation of the balanced scorecard. Kasurinen (2002) conducted a longitudinal case study aiming to specify types of barrier which might hinder, delay, or even prevent the process of change in management accounting in practice, in this case, the implementation of the balanced scorecard. His focus was the types of barriers, not the changes in motivational styles. He examined types of people considered as barriers to the implementation of the balanced scorecard. There were confusers, frustrators, and delayers. These three types would hinder or even prevent any changes, including the implementation of balanced scorecard. He did not discuss explicitly motivational changes, but he did discuss how to cope

with these barriers, i.e. how to ‘change’ the attitude of workers to ensure the success of the balanced scorecard’s implementation. It is worth noting that in the study, Kasurinen criticized Kaplan and Norton, the founders of the balanced scorecard, for not paying sufficient explicit attention to the context in which change was implemented.



## **Chapter Four**

### **Framework of the Study and Research Methodology**

#### **4.1 Definition of Variables and Scope of the Study**

The purpose of this study is to seek evidence in the context of a large industrial company in an Indonesian setting on the most effective motivational drivers, the association between motivation, level of cognitive ability, and performance, and how the balanced scorecard might enhance employees' motivational styles. There is no research yet to show whether the balanced scorecard can motivate employees, at least in Indonesia. Therefore, this study is conducted to provide such exploratory evidence.

The study was done at IMT, a prominent automotive company in Jakarta, Indonesia. IMT considers itself to be a learning organization, as it aims to find the best solutions for its business and operation. The business of IMT is trading cars. IMT belongs to Indomobil Group, one of the biggest automotive groups in Indonesia. Indomobil Group is a public company with an annual revenue of Rp.13 trillion (US\$ 1.52 billion). Indomobil group employs approximately 8000 employees. The managing director of Indomobil group; my husband, Mr. Wiwie Kurnia; was contemplating the introduction of the balanced scorecard system to

boost the group's performance. Mr. Kurnia and his team believed that the balanced scorecard might be an effective tool to motivate their employees to reach the company's goals. Before the implementation within the whole group, Mr. Kurnia decided to conduct a "pilot project" at IMT, one of the companies in the group. Mr. Kurnia appointed me to conduct the pilot study to seek evidence on whether the balanced scorecard was worth implementing. My role as a researcher, the wife of the Managing Director of Indomobil Group, and the head of the pilot study created a unique situation with many advantages but also disadvantages. The advantages I gained including easy access to respondents, and the assurance of feedback from the respondents. Due to the unique and sometimes restrictive business culture, in Indonesia it can be very difficult to carry out any research in a business setting without strong personal contacts. On the other hand, with my position, I might get biased answers. The respondents might assume that their answers would affect their career in the firm, and therefore try to impress me with answers that did not describe their real attitude. I tried to overcome this problem by convincing them that this was merely a piece of research, and their answers would not affect their job and position (see Chapter 5 section 5.2).

This study was seen as a 'pilot project.' Therefore, the result of this study aimed not only to contribute to current understanding about motivational styles in the context of an Indonesian business setting, but also to assist the management of Indomobil group in implementing the balanced scorecard.



This study was designed to answer the following research questions in the context of a large industrial company in Indonesia:

- 1. What are the motivational drivers in an Indonesian company?**
- 2. Does implementation of the balanced scorecard significantly and effectively enhance the employees' motivation?**
- 3. Is there any association between motivation, level of cognitive ability, and performance in the Indonesian cultural context?**

The three research questions can be answered by gathering and analyzing qualitative and quantitative data. Motivation, motivational styles, attitudes, and preferences are qualitative variables that are not directly observable. Therefore, I quantified these qualitative variables by using a Likert scale in two questionnaires. I added to it qualitative data from interviews and focus groups. These aimed to provide qualitative data, leading to a deeper understanding of individual responses to the BSC. However, analysis involved grouping replies, making it possible to quantify the qualitative data.

For the first research question, I obtained the respondents' attitudes towards motivating factors by distributing questionnaires and asked them to rate their attitudes towards motivating factors on a Likert scale. From these answers, I also distinguished their motivational styles, strengthened by data from interviews.

For the second research question, I required quantitative data on motivation before and after the balanced scorecard implementation (from the questionnaires), and also qualitative data from the interviews and focus groups.

In answering the third research question, I obtained the level of cognitive ability based on the critical reasoning scores. The level of performance was measured by the balanced scorecard scores.

For all questions, I carried out steps as follows: collecting quantitative data before the implementation of the balanced scorecard, implementing the balanced scorecard, and collecting quantitative data after the implementation of the balanced scorecard.

### *Identifying motivational styles*

I considered some possible methodologies to identify motivational style. The first was to use tests derived from Craske's (1988) procedure. These tests aimed to identify motivational styles of middle managers with relatively the same intelligence level. The motivational styles identified by the tests derived from Craske's included both mastery oriented and maladaptive motivational styles. Four sets of test were derived from the Graduate Management Admission Test (Schaeffer *et al.*, 1996). These contained critical reasoning type items. Tests A, C, and D were of equal difficulty. As for Test B, the difficulty level was higher than Tests A, C, and D, and the respondents were expected to experience failure



on test B relative to test A. Craske (1988) used these tests to identify motivational styles by giving Tests A, B, C, and D consecutively and tests B, C, and D were preceded by feedback on results of the previous test. Before test D was given, the tester mentioned that this test was the most difficult test, and she expected the group to try as hard as they could. Motivational style was based on the pattern of scores:

- Individuals that got  $[C \geq A]$  were rated as having adopted a mastery oriented motivational style. The reasoning was that individuals who were not adversely affected by the experience of failure (Test B) must be adopting mastery orientation.
- Individuals obtaining  $[C < A]$  was seen as having a maladaptive motivational style, because they were affected by the experience of failure (Test B). The researcher then divided the maladaptive motivated individuals into two categories:
  - Individuals that got  $[D \geq C]$  were seen as adopting the self-worth motive. Craske (1988) assumed that when the respondents were told that test D was the most difficult test, their self-esteem would not be threatened by fear of failure following effort, and they would therefore try their best to do well on the test.
  - Individuals with  $[D < C]$  were seen as adopting a learned helpless motivational style, because they were intimidated by the false knowledge that Test D was the most difficult test compared to the other tests. Craske (1988) assumed they had already obtained poor results on

Tests B and C, and they now would see no point in trying on Test D when told that it was the most difficult.

However, I finally recognized that there were flaws in tests derived from Craske's (1988) procedure. Firstly, the tests were originally used to decipher motivational style in primary school children learning mathematics. The procedure has never been used in a business setting with adults. Secondly, other factors may result in differences in test results. In particular, there were two major problems of test construction. First, it is not clear that performance on critical reasoning tests can be improved by greater effort. In Craske's original tests, the role of effort was crucial to performance level. Second, demonstrating the equivalence of tests A, C and D in critical reasoning tests with adults is infinitely more difficult than in simple arithmetic tests with eight year olds. Overcoming these problems was far beyond the scope of this study. The use of Craske-type tests was therefore reluctantly abandoned. Therefore, I used questionnaires to identify motivational style before and after implementation of the BSC.

### *Identifying motivators*

The questionnaires also attempted to identify the respondents' attitudes towards the balanced scorecard before and after its implementation, and relevant motivators. These questionnaires also aimed to determine the influence of the moderating variable in shifting the motivational styles towards mastery orientation. Other accepted social science methods, conducting focus groups and informal interviews, were used with the aim of obtaining additional information



from participating respondents. The less formal the process is, the more the degree of openness. I hoped to obtain some brainstorming ideas from the focus groups that would help me in identifying the motivators with greater validity.

#### *Identifying level of cognitive ability and work performance*

I included level of cognitive ability as a variable because I presumed that the company would need employees who were capable of thinking logically and analytically. I tried to identify the relationship between level of cognitive ability and motivation. The critical reasoning tests initially included as part of Craske's procedure were used to identify the level of cognitive ability. I used only Tests A and B to identify levels of cognitive ability, as test A was designed as an ordinary critical reasoning test and test B was designed to be substantially more difficult and was therefore likely differentiate between respondents with different ability levels. Tests C and D were not appropriate for measuring the level of cognitive ability because they were designed to identify reactions after experiencing difficulty. Moreover, since the respondents would be evaluated by the balanced scorecard for the first time, the actual results from the balanced scorecard were used as work performance measurement for my study. (See chapter 3, section 3.3 about the performance measurement in the balanced scorecard).

After careful thought and consideration, I finally decided the first research question should be answered by distributing and analyzing the questionnaires. In the questionnaires, the respondents were asked to identify factors that motivated

them. Informal interviews and focus group would also help in identifying and analyzing these motivational drivers.

Initially, in answering the second research question, I intended mainly to use the results from the tests derived from Craske's (1988) procedures, which I initially believed could be a sufficient measure of motivational styles. However, as mentioned above, I decided not to use Craske's procedure for my study.

Therefore, in answering the second research question, whether the implementation of the balanced scorecard significantly and effectively enhanced the employees' motivation, and which attributions helped the respondents the most in enhancing motivation, I compared results from the first and second questionnaires with data from the BSC results, drawing also on supplementary data from interviews and focus groups. The interviews and focus groups aimed to provide an insight into possible motivating factors such as implementation of the balanced scorecard, top management's commitment, corporate culture, co-workers' support, and rewards.

The answer to the third research question resulted from the questionnaire results (which identify the respondents' motivation), the critical reasoning tests (which measure their level of cognitive ability), and the results from the balanced scorecard (which measure their performance). The association between level of



cognitive ability and performance in the Indonesian cultural context was analysed with the help of regression analysis.

The study attempted to determine reasonable relationships between the dependent variable (motivational styles and performance) and the independent variable (implementation of balanced scorecard), taking account of the moderating variable (cognitive ability of the respondents). The main stages and time frame of the study were:

1. *October 2002 – December 2002*: Identification of motivational styles of the employees *before* the implementation of the balanced scorecard, by asking the respondents to complete questionnaires, and by conducting informal interviews and focus groups. A participating group consisting of middle level sales managers would complete the first questionnaire to assess their motivational styles before seeing whether the balanced scorecard helped to change their motivational styles. They were also asked about what motivational drivers were most important to them.
2. *Starting January 2003*: The implementation of the balanced scorecard, and provision of a support center for implementing the balanced scorecard.
3. *January 2004 – September 2004*: After the balanced scorecard implementation, this stage is to identify the motivational drivers, motivational styles, level of cognitive ability, and performance in an Indonesian business setting, by conducting the post-implementation questionnaires, focus group and interviews, as well as obtaining the results from the balanced scorecard.

4. *January 2004 – July 2005*: Analysis of the changes in motivational styles, following the implementation of the balanced scorecard.
5. *January 2004 – July 2005*: Analysis of the association between motivation, level of cognitive ability, and performance in the Indonesian cultural context. Critical reasoning tests (formerly intended to be the tests derived from Craske's procedure) were conducted to decipher the respondents' level of cognitive ability. The results from the balanced scorecard were obtained as a measure of performance. These were used to answer the third research question in which I analysed the association between motivation, level of cognitive ability, and performance in the Indonesian cultural context.

The participating group members were ninety seven middle level managers of IMT. They were selected based on convenience sampling, as they were the employees most conveniently available in IMT. The criteria for recognition as middle managers were their echelon in the company, and that they had been working for at least two years in this level. When I asked the selected persons, every one agreed to participate. The participating group members' motivational styles before and after the implementation of the balanced scorecard were distinguished and compared. At the beginning and the end of the research, questionnaires obtaining subjective perceptions of how people became motivated were filled out by the participating groups. The result aimed to show whether the balanced scorecard encouraged changes in attribution, and to answer what factors in the balanced scorecard motivated people the most.



The study was longitudinal. I chose to do a field study in a realistic setting to strengthen external validity and justify a wider ranging study of the whole Indomobil Group. The more realistic the research situation is, the stronger the effects of the variables, and the more valid generalization to other context is likely to be. My study is a case study, and it is not easy to generalize from a case study. However, since my case study is done within the Indomobil Group, it may be possible with caution to generalize the study results within the group, as workers in firms within the group are likely to have a similar culture and experiences. Moreover, field studies are appropriate for studying social and psychological influences and changes in real-life situations, such as my research topic. They are also applicable to a wide variety of problems. However, there are some obstacles I may encounter in my research. I may lack control and precision, as there are extraneous variables in my field study that I can not control. These uncontrollable variables may include the culture, volatile economic & political conditions in Indonesia, and how each respondent's personal circumstances affect their motivational styles. A study of this sort cannot control all variables that may affect its results.

## 4.2 Research Instruments

### Design and Construction of Questionnaires

The results from the questionnaires were used to answer the research questions.

Two sets of questionnaires were distributed to the participating respondents, one before the balanced scorecard implementation, and one after. The questionnaires were designed with the intention of obtaining information on the respondents' mind-set about external and internal attributions, ideal working conditions and factors enhancing their motivation to excel (the questionnaires are reproduced in appendices 2 and 3). The questionnaires utilized a Likert scale to measure the respondents' preferences on the particular questions asked. The questions are not mutually exclusive.

The Likert rating was as follows:

5 = strongly agree

4 = agree

3 = depends

2 = disagree

1 = strongly disagree

I did not specifically create an option for 'don't know' or 'no opinion' answers, as the scale was meant to measure the likelihood of the respondents' opinion regarding the issues asked, from strongly agree to strongly disagree. The best option describing the 'no opinion' option was scale 3 (depends). Respondents



choosing scale 3 (depends) as their answers were considered indecisive and it was assumed they actually did not have any opinion about the issues asked.

Section A investigated motivational styles adopted by the respondents. In my study, motivation is defined as something that drives people to do something. I interpret motivators into four sub-categories which were asked in the questionnaires:

- external attribution: bad luck
- external attribution: difficulty of the task
- internal attribution: self effort
- internal attribution: self ability

From those four attributional preferences, I divided motivational styles into three main categories, mastery orientation, self-worth and learned helpless motivational style. The construction of the questions in the questionnaires was based on attribution theory. In attribution theory, people offer explanations about why things happened. As contributors to attribution theory, Dweck and her associates (1995; 1993; 1988) had identified two implicit theories of personality that predict what an individual is likely to infer about a task. One theory, termed an ‘entity theory,’ assumes that an individual’s belief about an attribute (such as innate ability) are fixed entities that cannot be changed. The other theory, termed an ‘incremental theory,’ holds, on the contrary, that the qualities of a person are not fixed but malleable.

The classification of motivational styles was based on Dweck's (2000) and Covington's (1998) concept of the selfworth motive. According to Dweck (2000), in entity theory, people who attribute their failure on a task to lack of ability (question A4 in my questionnaires) are likely to give up and make no further effort, and therefore they are said to adopt a learned helpless motivational style. Meanwhile, in incremental theory, mastery oriented people look for explanations or attributions which will help them to overcome the problem they have experienced (question A3 in my questionnaires). Covington (1998) sees self perceived ability as central to people's motivation, but he emphasises the importance people attach to maintaining their sense of self-worth. He argues that people sometimes adopt strategies such as self-handicapping strategies which enable them to attribute failure on a high status task to factors which do not impute lack of ability. Self-handicapping involves the creation of some impediment to one's performance – either imagined or real – so that the individual has a ready excuse for potential failure (in question A1, I chose an “external attribution – bad luck,” and in question A2 an external attribution – difficulty of task” as the impediment).

Consistent with this, Weiner (1992) assumed that people perceive the causes of their success or failure on a continuum of dimensions such as stable-unstable, internal-external, controllable-uncontrollable. Weiner argued that attributing success or failure to stable causes such as “innate” ability (e.g. Dweck's entity theory) which are considered uncontrollable; is less likely to enhance performance



than attributing them to less stable causes such as effort that are more controllable (e.g. Dweck's incremental theory). Therefore, mastery orientation is considered preferable both in education and in business settings.

In the questionnaires, section A investigated various motivational styles adopted by the respondents

- Question (A1) reveals the attribution that respondents associated with external circumstances. Should a respondent strongly agree that failure on a task would be due to bad luck, it would be assumed that he placed high importance on external circumstances such as bad luck.
- Question (A2) indicates whether a respondent attributed his ability more or less to the difficulty of the tasks. In this case, the more a respondent utilized the level of difficulty of the task in explaining his failure, the less he valued his ability compared to the difficulty of the tasks.
- Question (A3) investigated the respondents' level of introspection and whether they adopted an important aspect of mastery oriented motivational style. When a respondent adopted an attitude of continuous improvement and always felt obliged to try harder, it was assumed that he was adopting a mastery oriented motivational style.
- Question (A4) aimed to identify the learned-helplessness motivational style. The more a respondent agreed about his lack of ability, the more he adopted the learned-helplessness motivational style.



These questions aimed to reflect the respondents' motivational styles based on the assumptions that they answered them truthfully.

Part A of the questionnaires enabled me to identify motivational styles in the following way:

1. When a respondent pinpointed bad luck highly in explaining his failure (score 4 to 5 in Question A1), he was considered to be adopting a maladaptive motivational style stressing an external attribution – bad luck. This type of maladaptive motivational style can be considered to indicate self worth motivational style.
2. When a respondent identified efforts as something he should increase to avoid failure, (score 4 to 5 in Question A3), he was considered to be adopting mastery oriented motivational style stressing an internal attribution – effort. Effort is an important aspect of mastery orientation. Mastery oriented people respond to failure by seeking evidence that will help them to overcome their problems, and as a result of their constructive problem solving response, they increase their effort.
3. When a respondent censured his lack of intelligence strongly in explaining his failure (score 4 to 5 in Question A4), he was considered to be adopting a maladaptive motivational style by stressing an internal attribution – lack of intelligence. This type of maladaptive motivational style can be considered a learned helpless motivational style.



There could be some contradictory results, for example where a respondent gave a rating of 4 or 5 for all questions. In this case, I would put this particular respondent in a special group where I could interview him later to obtain more information on his motivational style.

Question 2 was initially formulated to obtain more information about external attributions, indicating people whose external attributions, focused on difficulty of the task, rather than bad luck (in Q1). Instead of blaming everything on bad fortune, condemning the level of difficulty of the task would be a more pragmatic response. While bad luck could be considered one way of protecting a sense of self-worth, task difficulty can be seen as an alternative self-worth attribution.

Hence, it can be seen as providing information on the self worth motive.

However, there might be circumstances in which the task was really too difficult for the respondents. Therefore, I excluded question (A2) in identifying motivational style. Instead, I used question (A2) in general as an indication of the difficulty of the tasks given, compared to the respondents' performance (how many "failures" there had been in the respondents' department in a year).

Section B aimed to reveal the respondents' thoughts regarding the conditions they considered helpful in doing their everyday job. Questions (B1) to (B5) in the first questionnaires before implementation of the BSC were based on all the balanced scorecard attributes claimed by Kaplan and Norton (2000). Before the BSC implementation, the respondents did not know the details of the balanced

scorecard. However, they had been given a hint about a tool being developed to help them to align their work with the company's goals. After the implementation of the balanced scorecard, in section B the respondents described how the balanced scorecard had helped them, based on the attributes described in the first questionnaires. The results of the first questionnaire were compared with the answers from the later questionnaires to determine the effectiveness of the balanced scorecard according to the respondents, and to ascertain whether the balanced scorecard did indeed possess the attributes claimed by its founders.

Section C described the factors motivating the respondents the most. The balanced scorecard itself was addressed in question (C1). It is a tool for assessing performance at work to help direct the organization's aims that had been identified by the top management and is related to the rewards, so questions (C3) and (C5) are also relevant. Questions (C3) and (C4) served as additional information regarding what other factors motivated the respondents.

### Critical reasoning tests

Items for critical reasoning tests were taken from the Graduate Management Aptitude Test (Schaeffer *et al.*, 1996). Two sets of critical reasoning tests were completed by the participating respondents. One set was conducted before the balanced scorecard was implemented, and one afterwards. These Graduate Management Aptitude Tests (GMAT) originally were designed to predict the aptitude of prospective graduate students to learn management. Almost all



prominent business schools in the United States of America and Asia use these tests as one of the graduate admission requirements. The GMAT score is believed to measure the prospective students' success in taking an MBA program. As a parameter for aptitude, the GMAT contains critical reasoning problems, mathematics, and other tests. I particularly selected the critical reasoning tests from the GMAT for my study. I used these tests to identify the participating respondents' cognitive ability in learning how to do their jobs.

### **Interpretation of the critical reasoning test results**

The results from the critical reasoning tests were in simple ordinal scale. The higher the score, the higher the level of cognitive ability.

### **Informal Interviews**

Informal interviews were designed to be done casually whenever I encountered the participants, when I was preparing the implementation of the balanced scorecard, and when the actual results of the balanced scorecard were distributed.

Before the BSC implementation, I asked them questions such as:

- Why do you think Indonesia is experiencing these multi dimensional crises?  
Whose fault is this?
- Who do you think is responsible for the firm's success or failure?

- If you experience failure, who do you think is responsible? Is it the situation in Indonesia that makes you fail?
- Do you think intelligence affects performance?
- What do you think would be the best solution for improving the working environment?
- Which do you think motivates people the most? (a) Financial rewards? (b) Good teamwork? (c) Positive recognition from the boss?

After the implementation, I asked similar questions, with some additional questions about the balanced scorecard implementation, such as:

- Do you think the balanced scorecard helps people to perform better?
- What do you think were the flaws in implementing the balanced scorecard? Or did the balanced scorecard itself carry some flaws?
- Do you think the balanced scorecard motivates people?
- Do you think the balanced scorecard creates a supportive environment within the company?
- Do you think it is wise to tie the scores in the BSC with financial reward? Why, or why not?

## Focus groups

Two focus groups were conducted, one before the BSC implementation, and one after. The focus group participants were selected from among the respondents in the study. One focus group was conducted with 12 participants selected randomly



among the 97 respondents. Of the twelve members before the BSC implementation, eleven were also members of the post-implementation focus group, while one had resigned. In the post-implementation focus group, there was one new member selected randomly from the remaining of the respondents. Every one selected agreed to take part. Before the BSC implementation, the topics were:

- Failures to do tasks at work and what factors cause them
- Effective working environment
- Motivation

After the implementation, the topic was the same as above, plus an additional topic on the balanced scorecard.

### **Interpretation of the interviews and focus groups**

I made notes on every answer in the interviews and focus groups, and compiled them into categories based on their occurrences or modes:

- Before implementation:
  - Motivational styles
  - Working condition
  - Motivation drivers
- After implementation:
  - Motivational styles
  - Working condition
  - Motivation drivers

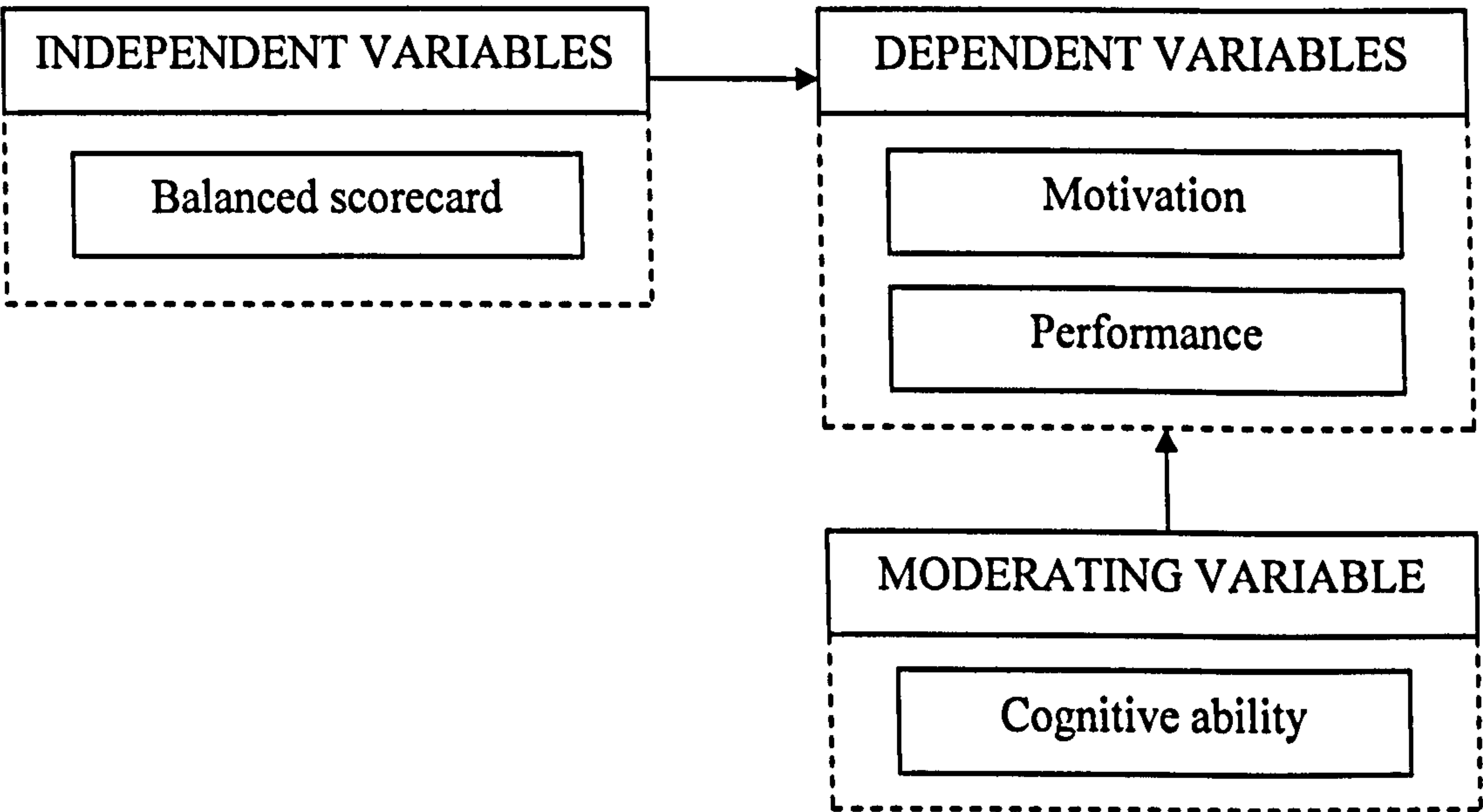
I compared and analysed these answers with the results from the questionnaires.

**Interpretation of the results of the balanced scorecards**

The results or scores of the balanced scorecards were used as they stand. Higher scores indicate better performance. (For the balanced scorecard compilation and performance evaluation, see Chapter 3, section 3.3)

**4.3 Framework of the Study**

The framework of this study is as follows:



*Chart 4.1. Framework of Study*

As mentioned before, my study attempted to identify motivational drivers in the context of a large industrial company in Indonesia. Some potential drivers were



the implementation of the balanced scorecard, the top management's commitment, corporate culture, co-workers' support, and the rewards. Cognitive ability might serve as a moderating variable in motivation and performance. In fact, the study sought to identify any association between motivation, cognitive ability and performance in the Indonesian cultural context.

The study assumed that participating employees received no training during the pre-implementation and post-implementation phases of the balanced scorecard apart from the implementation of the balanced scorecard itself. While it was also assumed and hoped that the members of the participating group would not change positions or responsibilities during the project, twelve respondents did leave their job during the study. At the beginning of the study, there were 97 respondents participating, and at the end only 85 remaining. During the study, the actual number of interviews held was 46, and the number of people interviewed was 23. I interviewed each respondent twice, before and after the implementation of the balanced scorecard. I tried to keep the same persons in the pre and post implementation interviews, however, one person resigned during my study. Therefore I had to replace him with another respondent selected randomly among the rest of the respondents.

## 4.4 Reliability

“Reliability is the accuracy or precision of a measuring instrument” (Kerlinger, 1986, p. 405). Reliability covers stability, dependability, predictability, and accuracy. Sekaran (2000) explained that “the reliability of a measure indicates the extent to which the measure is without bias (error free) and hence offers consistent measurement across time and across the various items in the instrument” (p. 204). A measure is considered reliable if a person’s score on the same test given twice is similar. Reliability is not measured, it is estimated. Reliability is the prerequisite to validity. When a test is not reliable, then it is not valid either. I used four different instruments in my study. The questionnaires basically asked about the respondents’ orientation towards factors affecting or affected by motivation. Ideally the questionnaires would have been checked by asking a sample of respondents in a pilot project to complete the questionnaires on two separate occasions, and the correlation between the two tests would show the test-re-test reliability. However, this was considered impractical due to constraints on my respondents’ time. (Interrater-reliability is less of a problem as the Likert scale responses were both discrete and unambiguous).

The critical reasoning tests were derived from Graduate Management Aptitude Test, a set of tests designed to investigate the level of cognitive ability of prospective MBA students all around the world. According to the Graduate Management Admission Council (2002), the average reliability for the GMAT total score is 0.92, while perfect reliability is 1.00. Therefore, the reliability of the



GMAT score accurately reflecting cognitive ability is very high. In measuring performance, the balanced scorecard was used to identify and evaluate my respondents' accomplishments. The balanced scorecard has been used by hundreds of companies in USA and Europe. The reliability of the balanced scorecard is high, according to Kaplan and Norton (2000).

## **4.5 Validity**

The commonest definition of validity is epitomized by the question: "Are we measuring what we think we are measuring" (Kerlinger, 1986, p. 417)? Validity is the strength of our conclusions, inferences or propositions. More formally, Cook and Campbell (1979) define it as the "best available approximation to the truth or falsity of a given inference, proposition or conclusion" (p.135).

In assuring construct validity, I had to show that in theory the implementation of the balanced scorecard actually should be able to motivate employees generally, and a reasonable relationship between motivational style, level of cognitive ability, and performance could reasonably be expected. In assuring this, I used several tools such as questionnaires, critical reasoning tests, balanced scorecard, interviews, and focus groups.

The questionnaires aimed to identify the various motivational styles adopted by the respondents, some factors that contributed to their motivation, and also the

respondents' attitudes towards the balanced scorecard, before and after its implementation. These questionnaires also helped to show how much influence the moderating variable had in shifting the motivational styles towards mastery orientation. The construct validity of the questionnaires was based on their development (see section 4.2) with its origin in attribution theory.

The balanced scorecard was constructed to evaluate performance. Performance of employees is how an employee contributes to the firm. The development of the balanced scorecard began with the firm's strategies. Therefore, the performance evaluated was based on the firm's overall strategies.

Level of cognitive ability is indicated by scores on critical reasoning tests derived from GMAT problems used in pre-MBA tests. In identifying level of cognitive ability, I used two sets of critical reasoning tests. The critical reasoning tests provided information on the respondents' cognitive ability for the work they were doing. Two sets of tests were conducted, one before the balanced scorecard implementation, and one afterwards.

The pre-implementation tests were Tests A1 and B1, originally designed for the Craske procedure (Chapter 4, section 4.1). Thus, they included one test that would be likely to discriminate between respondents. Post implementation, Tests A2 and B2 were used. These, too, were originally designed for the Craske procedure. The reason for repeating the cognitive reasoning tests was to investigate the (remote)



possibility of changes following implementation. Each test contained 10 questions, all of which were scored 1 or 0. The overall score for each respondent was the mean of Tests A and B. The mean for Test A1 was 5.20, Test A2 5.88, Test B1 2.11, and Test B2 1.81. The decision to use the mean score on both tests was based on the need for more discrimination between respondents than was provided by Test A alone.

Graduate Management Admission Council (2002) described the validity of the GMAT in comparison with the mid-program graduate management school grades. The average correlation between those two was 0.48, where 1.0 indicates perfect accuracy of prediction. The variable I was trying to measure was the level of cognitive ability, which is not necessarily measured by college grades.

The interviews and focus groups aimed to elicit more personal data regarding the respondents' motivational styles, and their attitudes toward the implementation of the balanced scorecard. These tools were merely supporting the questionnaires, balanced scorecard and critical reasoning tests.

The existence of a hypothetical relationship between the implementation of the balanced scorecard and motivation was argued by Kaplan and Norton (2000), the founders of balanced scorecard. Therefore, I assumed it was valid to hypothesise a relationship between them. Also a hypothetical association was assumed between motivation, level of cognitive ability and performance.

The cognitive tests were derived from the Graduate Management Aptitude Tests (Schaeffer *et.al.*,1996). They were originally given in English. Actually my respondents were supposed to be able to speak English, as it was part of the employee requirement. However, to minimize the risk of misunderstanding, the tests were translated into Indonesian by an authorized translator in the University of Persada Indonesia. And to make sure that my respondents understand completely, I gave them both the original English version and the translation. The questionnaires, interviews and focus groups were administered originally in Indonesian language, and I asked the same translator to translate them into English for the purpose of this thesis. I double-checked the translation.

Considering my status as the researcher and also the wife of the Managing Director of Indomobil Group, it was possible that the respondents might hesitate to answer the questionnaires, interviews and focus groups honestly. I was very much aware that my unique position might be a threat to construct validity and jeopardize the objectivity and honesty of my respondents. Therefore, before I conducted the study, I gave the respondents a thorough explanation that I was conducting the study for my thesis, and this had nothing to do with my personal status or my husband. It is true that I was supervising them in the BSC implementation, but this was mainly because the implementation was part of my study. Respondents were told that the study would contribute to the firm's strategic decisions, whether the managing director would decide to implement the



balanced scorecard in all the companies in the group. It would not affect IMT's operational decisions, especially the HRD decisions concerning my respondents' promotion status. I guaranteed that whatever results I might see on individual performance would not affect their position or job in the future. I also stressed that there was no best motivational style and all answers were relative; there was no wrong answer. In collecting data, I continually reminded them that this was merely an academic study, contributing to strategic, not operating, decisions. For this pilot project, the results on the balanced scorecard were not tied to the employees' salary and bonuses.

I hoped by assuring construct validity, which could also assure external validity, that the results of my study could be generalized to other business setting in Indomobil group and in Indonesia.

## **4.6 Type of Investigation**

This study aimed to establish the differences between groups of employees based on different motivational styles perceived in a controlled situation with the implementation of the balanced scorecard, assuming everything else was held constant. It was meant to be a causal study for it was believed that the balanced scorecard would affect motivational styles. Because the study was conducted at IMT, and the participating group consisted of middle level managers of that company, the sampling design was non-probability judgement sampling.

## Respondents

My concern about how the level of power in the organization might be a contributing factor in motivational styles was reduced by choosing only middle level management employees as my respondents. The respondents involved in this study were all members of the sales force of IMT.

## Extent of Researcher Interference

In this study, the extent of researcher interference was moderate, as I implemented the balanced scorecard in order to investigate the changes in the motivational styles of the respondents, while still allowing other normal external features to happen. Things beyond my control were assumed to be stable. My position in the firm was quite unique. I was not an employee of that firm. However, I did have a special privilege in conducting the study and ‘manipulating’ my respondents, since my husband, Mr. W. Kurnia, was the Managing Director of the holding company, Indomobil Group. In fact, this study was seen as a pilot study for his plan to implement the balanced scorecard to all firms within Indomobil group. Nonetheless, in Indonesia, without extra power and position, it is almost impossible to conduct such research.



## **4.7 Data Collection Method**

As mentioned before, I gave the respondents questionnaires to complete. The respondents were asked to complete the questionnaires at their earliest convenience in two different phases, before and after the implementation of the balanced scorecard. I supervised and scrutinized the process of implementing the balanced scorecard closely, as I had designed the balanced scorecard myself. Some informal interviews and focus groups with the respondents were conducted during the implementation process. I also set up a support center in implementing the BSC. The members of the support center were the sales manager, the marketing manager, and the marketing director; each of them could appoint their suitable representatives to serve in the support center. The three of them were supposed to handle questions and queries related to the balanced scorecard from the sales force, my respondents. The support center was a place where all employees could turn when they felt confusion or trouble in implementing the balanced scorecard. I conducted ongoing supervision in the implementation of BSC. I came twice a month, to visit and talk to my respondents, whilst also checking the support center's achievements. Some of the topics I discussed with them were how the balanced scorecard motivated them and how they felt about the process.

## **4.8 Data Analysis**

There were several tasks to be done in analysing the data. Firstly, in identifying people motivated by internal / external factors based on questionnaires, I used the Microsoft Excel program in sorting the answers. I then conducted a regression analysis between BSC results (Y) and critical reasoning tests (X1 and X2), which was also done using Microsoft Excel program for regression analysis. The results from the focus group discussions and the interviews were categorized by use of Microsoft Excel. I used the occurrence of answers as an indicator of preferences in the focus groups and interviews. Finally, I conducted a qualitative comparative analysis between all the results. The results of the critical reasoning tests before the implementation of the balanced scorecard were compared to the pre-implementation motivational style. After the implementation, I looked at the relationship between critical reasoning scores, motivational style and performance on BSC performance indicators. I conducted chi-square analysis to identify an association between motivational styles, critical reasoning and performance. I also ran some T-tests to find out if there were statistically significant differences between the pre-and post-test ratings on the questionnaire.



## **Chapter Five**

### **Results 1:**

## **Motivating Factors in an Indonesian Business Setting and the Impact of Balanced Scorecard on Motivation**

### **5.1 Results from Questionnaires**

Two sets of questionnaires were distributed to the respondents, one before the balanced scorecard implementation, and one after. The questionnaires were designed with the intention of obtaining information on the respondents' attributions, ideal working conditions, and factors enhancing their motivation to excel (Appendices 1 and 2).

#### ***Before the Implementation of the Balanced Scorecard***

##### **Motivational Styles at Pre-Implementation of Balanced Scorecard**

Part A of the questionnaires attempted to identify the respondents' motivational styles in relation to how they rated internal or external attributions as motivating. The results of part A of the questionnaire before the implementation of the balanced scorecard are shown in Table 5.1 below.



		5	4	3	2	1
		Strongly agree	~Agree~	Depends	Disagree	Strongly disagree
A When you fail to do some tasks, what is your excuse likely to be?						
A1	You had bad luck (external attribution)	1%	2%	12%	38%	47%
A2	The task was too hard (external attribution)	0%	11%	44%	44%	2%
A3	You did not try hard enough (internal attribution)	16%	38%	15%	24%	8%
A4	You are not clever enough (internal attribution)	1%	10%	27%	47%	15%

Table 5.1 Percentage of Results of Part A before BSC implementation (N=97)

Only three percent of the respondents fell into self-worth category. Twelve percent of the respondents neither agreed nor disagreed about attributing their failures to bad luck. Thirty-eight percent disagreed about attributing their downfall to bad fortune. The most popular answer was scale 5; “strongly disagree about attributing failure to bad luck,” consisting of forty-seven percent of the respondents. (Table 5.1 line A1).

Sixteen percent of the respondents strongly agreed, that had they not tried hard enough, they would fail. Thirty-eight percent just agreed to attribute their failure to lack of effort. Those two categories of respondents would be seen as possessing positive internal attribution motivational style, mastery orientation. They included fifty-four percent of the respondents. This means forty-six percent of the respondents did not show this aspect of mastery oriented motivational style (Table 5.1 line A3).



Question 4 is potentially unpopular. Psychologically, it might be extremely hard for people to be 'honest' enough to admit that they are less intelligent. However, eleven percent of respondents, presumably lacking confidence in their own ability, were willing to attribute their failure on a task to not being clever enough. Only one percent of the respondents 'strongly agreed' that their failures were due to their incapability, but ten percent 'agreed' to the same item. Twenty seven percent were not sure whether their failures were caused by their lack of intelligence or not. Not surprisingly, forty-seven percent disagreed about attributing their failure to their inability, while fifteen percent strongly disagreed. In total, only 11% of the respondents were adopting learned helpless motivational style (Table 5.1 line A4) as defined above.

Forty-four percent of the respondents disagreed about attributing their failures to the difficulty of the task. Only two percent of the respondents "strongly disagreed" about blaming the difficulty of the tasks for their failures. (Table 5.1 line A2). From the first performance evaluation of employees using the balanced scorecard, there were no failures in the sales department. All my respondents fulfilled their minimum target. Therefore, I concluded that the tasks given were achievable and not beyond the respondents' capability.



I identified respondents with positive internal effort attribution (those with a rating 4 or 5 for question A3), and considered them to be adopting a mastery oriented motivational style. Forty seven respondents were considered to be adopting mastery oriented motivational style. Of the 47, respondents number R3, R5, R35, R38, R52, R70, and R84 also attributed their failure to their lack of intelligence in Question A4. They were therefore interviewed separately. I specifically interviewed these respondents, and found out that they were just being humble, as in Indonesian culture, humbleness is considered a decent virtue. Based on the interview, I finally categorized them as adopting mastery orientation. Three respondents (numbers R8, R37, R66) were considered to be adopting a self-worth motivational style (with ratings 4 or 5 for question A1), and only one respondent (number R15) was considered to be adopting the learned helpless motivational style (rating 4 or 5 for question A4). As many as 34 respondents' motivational styles were undetected by the questionnaires. They neither rated highly on the indicator of mastery orientation (question A3) nor on the other indicators (questions A1 and A4). I categorized them as adopting "non-mastery oriented motivational style" or "undetected motivational style." This demonstrates that adoption of motivation is multifaceted. Despite this possible inaccuracy, the questionnaires helped to describe the attribution of the respondents.

The mean ratings of Section A, in which the main question was “*When you fail to do some tasks, what is your excuse likely to be?*” are shown in Table 5.2 as follows:

<i>Question no.</i>	<i>Questionnaire description</i>	<i>Attribution to failure</i>	<i>Mean rating</i>
A1	You had bad luck	External: Luck	1.73
A2	The task was too hard	External: Difficulty	2.63
A3	You did not try hard enough	Internal: Effort	3.28
A4	You are not clever enough	Internal: Ability	2.35

*Table 5.2 Mean Rating of Part A before the BSC implementation (N=97)*

The mean rating to question A1 was the lowest (mean 1.73 out of 5). Attributing failures to bad luck was not popular, as people in Indonesia tend to believe that excellence can only be achieved by persistence. Answers to question 3 were rated the highest (mean 3.28 out of 5) as this particular question might be considered as a measurement of persistence and perseverance, qualities the respondents would want their boss to think they possessed.

**Motivating Conditions in the Workplace before Implementation of Balanced Scorecard**

Part B of the questionnaires was designed to understand the respondents’ perceptions regarding the *factors they considered helpful in doing their everyday jobs*. Table 5.3 below reports the respondents’ mean ratings on five items.

<i>Question no.</i>	<i>Questionnaire description</i>	<i>Mean rating</i>
B1	A tool that helps you to be aware of the company's vision that makes you try your best in doing your tasks	4.04
B2	A condition that gives you more self confidence in doing your daily tasks	4.11
B3	A condition that makes you feel as a part of the big project, the company	4.18
B4	An environment where you feel less competition between your colleagues	2.59
B5	The management provides a new environment enhancing the feedback control	4.10

*Table 5.3. Results of Part B before the BSC implementation (N=97)*

Before the implementation of the balanced scorecard, part B attempted to gain the respondents' perception of motivating working conditions. The five features in part B are actually features claimed to be embedded in the working conditions when companies implement the balanced scorecard. The founders of the balanced scorecard, Kaplan and Norton (2000), and other distinguished management experts in the United States of America have been claiming the success of this tool due to these features. Likewise, European companies have been implementing it successfully. Without being aware of what they were evaluating, the respondents described their perceptions of such features, and which feature they thought would help them more in doing their tasks. They reflected that being part of the big plan would be most likely to help them in their daily tasks (the mean is 4.18 out of 5). Other features such as: being able to understand clearly the vision of the company, healthy working climate enhancing their self-confidence,



and feedback control were middling with ratings of 4 out of 5. The lowest rating was for a less competitive environment (2.59 out of 5).

### Motivating Factors in Pre-Implementation of Balanced Scorecard

Part C of the questionnaires attempted to rank *factors enhancing motivation of the respondents*. Table 5.4 below shows the results of part C.

<i>Question no.</i>	<i>Questionnaire description</i>	<i>Important factors in motivation:</i>	<i>Mean Rating</i>
C1	A tool that helps you directing your aims	Tool for assessment/ evaluation of performance	4.03
C2	The top management’s commitment to excellence	Top management	4.06
C3	Positive corporate culture	Environment	4.20
C4	Your co-workers’ support	Co-workers	4.26
C5	The reward promised by the top management	Rewards	4.24

*Table 5.4. Results of Part C before the BSC implementation (N=97)*

Part C attempted to obtain the respondents’ perceptions of motivating factors. All of the features were rated positively with a mean above 4 out of 5. Support from co-workers was rated the highest, meaning the respondents perceived it as the strongest motivator. The rewards promised by management was ranked the second highest, only slightly lower. The other three motivating factors; a tool in directing your aims, management commitment, and positive corporate culture; were also rated as important, with mean ratings above 4 out of 5.



The main objectives of parts B and C were to obtain the respondents' perception of motivating factors, and what factors motivated them the most. Table 5.5 below shows the results of part B and C in term of percentage of respondents giving each rating.

		5	4	3	2	1
		Strongly agree	~Agree~	Depends	Disagree	Strongly disagree
B	What conditions would you consider helpful In doing your everyday job?					
B1	A tool that helps you to be aware of the company's vision	29%	53%	13%	2%	2%
B2	A condition that gives you more self Confidence in doing your daily tasks	29%	55%	14%	2%	0%
B3	A condition that makes you feel as a part of the big project, the company	26%	69%	4%	0%	1%
B4	An environment where you feel less competition between your colleagues	2%	14%	32%	44%	8%
B5	The management provides a new Environment enhancing the feedback control	22%	68%	9%	0%	1%
C	What factors motivates you to excel					
C1	A tool that helps you directing your aims	20%	69%	5%	4%	1%
C2	Top management's commitment to excellence	24%	60%	15%	0%	1%
C3	Positive corporate culture	27%	68%	4%	1%	0%
C4	Your co-workers' support	38%	53%	8%	0%	1%
C5	The reward promised by the top management	38%	49%	12%	1%	0%

Table 5.5. Percentage of Results of Part B and C before the implementation of the BSC (N=97)

More than fifty percent of the respondents judged these features in part B and C as important in helping them in daily tasks and motivation. The exception is that the feature in question B4, less competitive environment, was considered not very helpful in doing daily tasks.



*After the Implementation of the Balanced Scorecard*

After the balanced scorecard implementation, another set of questionnaires was distributed to seek any change or shift in the respondents’ perceptions of motivational styles and motivating factors due to the implementation of the balanced scorecard. Of the 97 respondents in the earliest questionnaires, 12 of them had left the company, and 85 remained for the post implementation questionnaires.

**Motivational Styles after Implementation of Balanced Scorecard**

Questions numbers A1 to A4 (part A) aimed to elaborate the main question: “When you fail to do some tasks, what is your excuse likely to be?” The following Table 5.6 shows the comprehensive results of part A.

		5	4	3	2	1
		Strongly agree	~Agree~	Depends	Disagree	Strongly disagree
A	When you fail to do some tasks, what is your excuse likely to be?					
A1	You had bad luck	1%(1%)	2%(2%)	28%(12%)	26%(38%)	42%(47%)
A2	The task was too hard	0%(0%)	9%(11%)	51%(44%)	38%(44%)	2%(2%)
A3	You did not try hard enough	18%(16%)	38%(38%)	11%(15%)	27%(24%)	7%(8%)
A4	You are not clever enough	0%(1%)	9%(10%)	33%(27%)	42%(47%)	15%(15%)

Table 5.6 Comprehensive results of Part A (N=85)  
(Pre-implementation percentage in brackets)

The results were similar to the results from questionnaires before the implementation. Table 5.7 below gives mean ratings on the questionnaires before and after the BSC implementation. I ran T-tests on each item of the questionnaires



to seek statistical difference between two means, the means of rankings before and after the BSC implementation. From the T-tests, with the level of significance of .01 and the degree of freedom of 84 [number of valid respondents (85)-1], I found no significant difference between the pre and post ranking in the questionnaires. The observed T-values of all items were below the critical T-value of 2.6.

<i>Question no.</i>	<i>Questionnaire description</i>	<i>Attribution to failure</i>	<i>Mean rating (Post impl)</i>	<i>Mean rating (Pre impl)</i>	<i>Observed T-value</i>	<i>Level of significance</i>
A1	You had bad luck	External: Luck	1.94	1.73	0.08	NS
A2	The task was too hard	External: Difficulty	2.67	2.63	0.02	NS
A3	You did not try hard	Internal: Effort	3.32	3.28	0.38	NS
A4	You are not clever	Internal: Ability	2.36	2.35	0.08	NS

*Table 5.7 Mean rating of answers to Part A (N=85)*

Similar to the previous questionnaires before the balanced scorecard implementation (see table 5.2), the results indicated that most of the respondents indicated that the most consistent attribution to failure was the ‘lack of effort’ (rating 3.32 of 5). This implied that the respondents tend to ‘blame’ themselves for not making sufficient effort when explaining their failure.

As I did before the implementation of the balanced scorecard, after the implementation, I identified respondents with positive internal attribution motivational style (the ones rating 4 and 5 for question A3), and considered them as to be adopting mastery oriented motivational style. Forty five respondents were



now considered to be adopting mastery oriented motivational style. The contradictory qualities were consistent compared to the questionnaire results before the BSC implementation, as respondents number R3, R5, R35, R38, R52, R70, and R84 (with mastery oriented motivational style) still attributed their failures to their lack of intelligence. I interviewed them again after I got these results, and confirmed that the contradictory was due to the humbleness (or supposed humbleness) cultivated within the Indonesian society. As I did in the pre-implementation questionnaires, I categorized them as adopting mastery orientation. Three respondents (numbers R2, R8, and R33) were considered to be adopting a self-worth motivational style (ratings 4 or 5 for question A1). In both questionnaires, R8 was categorized as adopting this type of motivational style. In the previous questionnaires, respondents number R2 and R33 formerly were categorized as adopting mastery orientation. I interviewed them specifically, and they indicated that finally they realized that effort was not enough to gain success, and luck was considered the X factor. Furthermore, they also mentioned that their “revelation” had nothing to do with the implementation of the balanced scorecard. In the questionnaires before the BSC implementation, respondents number R37 and R66 were formerly categorized as adopting self-worth motivational style, and in the latter questionnaires, the response of number 37 indicated that they had adopted mastery orientation, while number R66’s motivational style was now unclear. During the subsequent interview, number R37 indicated that she finally recognized her real ability by increasing her efforts to gain a high score in the

balanced scorecard. Respondent number R66 was just unclear about the cause of failure. In the post implementation questionnaires, respondent number R15 was still considered to be adopting the learned helpless motivational style (rating 4 and 5 for question A4), as he had been in the previous questionnaires. As many as 36 respondents' motivational styles were now undetected by the post implementation questionnaires, and therefore categorized as adopting “non mastery oriented motivational style.”

### Motivating Condition in the Workplace Created by the Implementation of Balanced Scorecard

Questions numbers B1 to B5 aimed to elaborate the main question: “*What do you think of the implementation of the balanced scorecard in association with motivation?*” Table 5.8 below shows the results.

<i>Q.</i>	<i>Questionnaire description</i>	<i>Mean rating (Post Impl)</i>	<i>Mean rating (Pre Impl)</i>	<i>Observed T-value</i>	<i>Level of significance</i>
B1	The balanced scorecard helps you to be aware of the company's vision that makes you try your best in doing your tasks	3.99	4.04	0.16	NS
B2	The balanced scorecard gives you more self confidence in doing your daily tasks	4.00	4.11	0.08	NS
B3	The balanced scorecard makes you feel as a part of the big project, the company	3.99	4.18	0.00	NS
B4	By implementing the balanced scorecard, you feel less competition between your colleagues	2.63	2.59	0.09	NS
B5	The balanced scorecard provides a new environment enhancing the feedback control environment enhancing the feedback control	4.19	4.10	0.00	NS

Table 5.8. Mean rating of answers to Part B (N=85)



In part B, I asked the respondents about what aspects of the balanced scorecard motivated them. The respondents seemed motivated by at least four aspects of the balanced scorecard. Despite the different questions asked, the results of the questionnaires before and after the implementation of the balanced scorecard were very similar. None of the differences reached the level of statistical significance. Whether being asked about motivating conditions in the workplace or how the balanced scorecard created motivating condition in the workplace, the least important factor was “competition with co-workers” (scored 2.63 of 5). Moreover, the other four factors motivating the respondents were all rated above four out of five. This means the respondents perceived the balanced scorecard as carrying these four important attributions.

**Motivating Factors after Implementation of Balanced Scorecard**

Questions C1 to C5 aimed to elaborate the main question: “*What factors motivate you in the implementation of balanced scorecard?*” Table 5.9 below shows the mean ratings of answers to this question.

<i>Q</i>	<i>Questionnaire description</i>	<i>Important factors in motivation:</i>	<i>Mean rating Post Impl</i>	<i>Mean Rating Pre Impl</i>	<i>Observed T-value</i>	<i>Level of significance</i>
C1	Balanced scorecard	Balanced scorecard/tool	4.00	4.03	0.50	NS
C2	Top management	Top management	4.10	4.06	0.08	NS
C3	Environment	Environment	4.20	4.20	0.08	NS
C4	Your coworkers	Co-workers	4.27	4.26	0.00	NS
C5	The reward	Rewards	4.19	4.24	0.00	NS

*Table 5.9. Mean ratings of answers to Part C (N=85)*

In part C, I specifically asked the respondents about the factors that motivated them in the process of the BSC implementation. The reason I asked these questions is that in implementing the balanced scorecard, besides the balanced scorecard itself, other factors were also new or changed in the firm's atmosphere. For sure, the top management's commitment to the implementation of a new initiative has obviously been shown. Yet the workshops and group trainings that I conducted at the early stage of the implementation could also have changed the environment. Also the support center and my bi-weekly visits during the past year were visible evidence of change in the work place. Now that all the respondents were being evaluated with the help of a new tool, peer pressure was also somewhat different than before the BSC implementation. The respondents on average described peers (the co-workers) as the best motivator (table 5.9, line C4; the score was 4.27 of 5). It is noteworthy that supportive co-workers is a strong motivating factor while "less competition" among co-workers is not (see table 5.8; 2.63 of 5). Interestingly, the mean score for the balanced scorecard was the lowest (table 5.9, line C1; the score was 4 out of 5). The respondents considered that other things motivated them better than the balanced scorecard itself. Other factors such as top management commitment, environment and reward were considered as good motivators as well. The T-test results showed that none of the differences between pre and post implementation reached the level of statistical significance.



Table 5.10 below gives the comprehensive results of parts B and C after the implementation of the BSC.

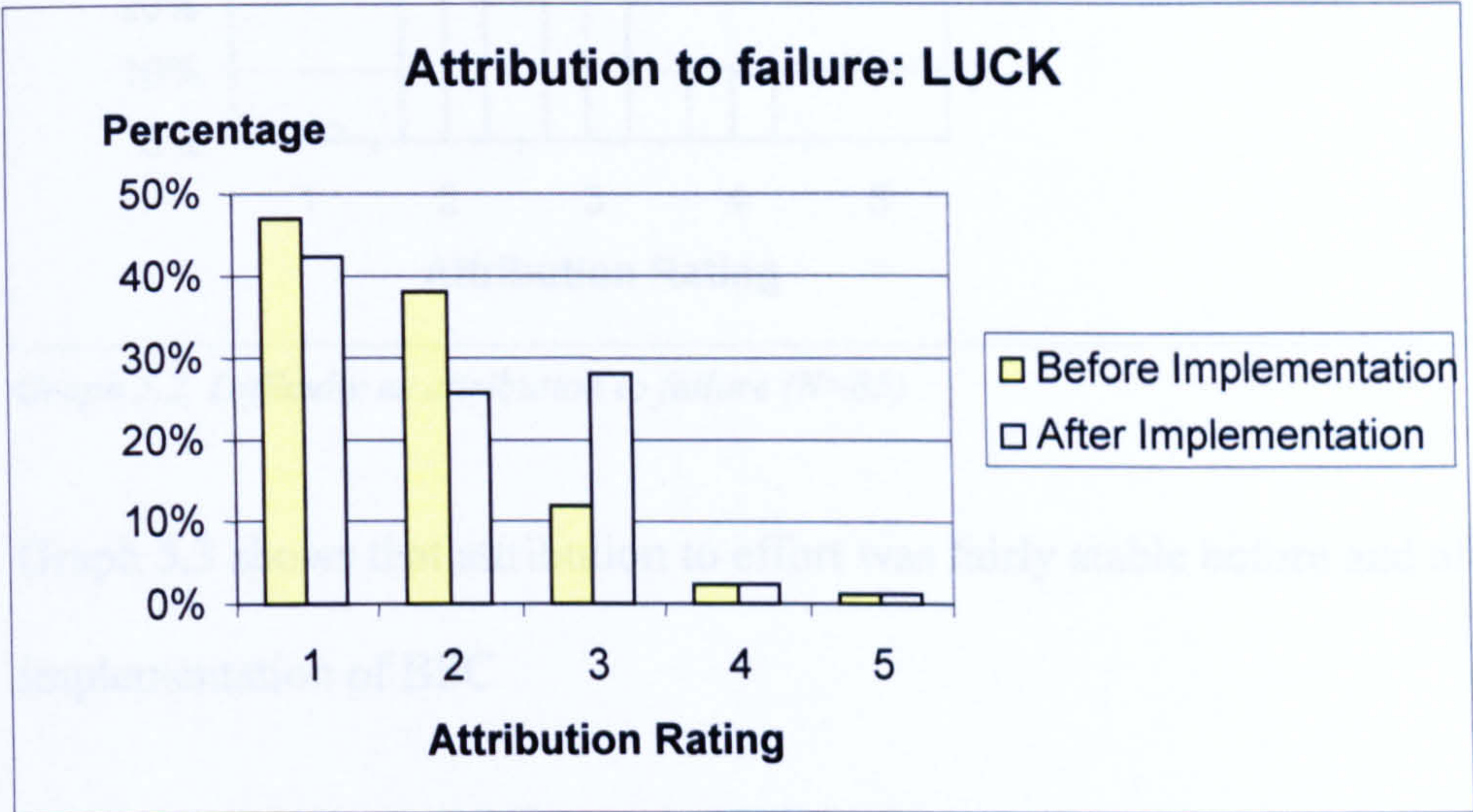
		5 Strongly agree	4 ~Agree~	3 Depends	2 Disagree	1 Strongly disagree
B	What do you think of the implementation of the balanced scorecard in association with motivation					
B1	The balanced scorecard helps you to be aware of the company's vision that makes you try your best in doing your tasks	25%(29%)	54%(53%)	16%(13%)	4%(2%)	1%(2%)
B2	The balanced scorecard gives you more self confidence in doing your daily tasks	25%(29%)	54%(55%)	18%(14%)	4%(2%)	0%(0%)
B3	The balanced scorecard makes you feel as a part of the big project, the company	20%(26%)	61%(69%)	18%(4%)	0%(0%)	1%(1%)
B4	By implementing the balanced scorecard, you feel less competition between your colleagues	2%(2%)	14%(14%)	34%(32%)	42%(44%)	7%(8%)
B5	The balanced scorecard provides a new Environment enhancing the feedback control	33%(22%)	55%(68%)	11%(9%)	0%(0%)	1%(1%)
C	What factors motivates you in the implementation of balanced scorecard ?					
C1	The balanced scorecard itself	20%(20%)	64%(69%)	11%(5%)	5%(4%)	0%(1%)
C2	The top management	27%(24%)	57%(60%)	14%(15%)	0%(0%)	1%(1%)
C3	The environment	29%(27%)	62%(68%)	7%(4%)	1%(1%)	0%(0%)
C4	Your coworkers	39%(38%)	52%(53%)	8%(8%)	0%(0%)	1%(1%)
C5	The reward	35%(38%)	49%(49%)	14%(12%)	1%(1%)	0%(0%)

*Table 5.10 Comprehensive Results of parts B and C (N=85)  
(Pre-implementation results in brackets)*

When the questionnaires results before and after the implementation of BSC had been attained, I compared both results visually, using histograms. Generally the results were relatively stable with no dramatic changes.



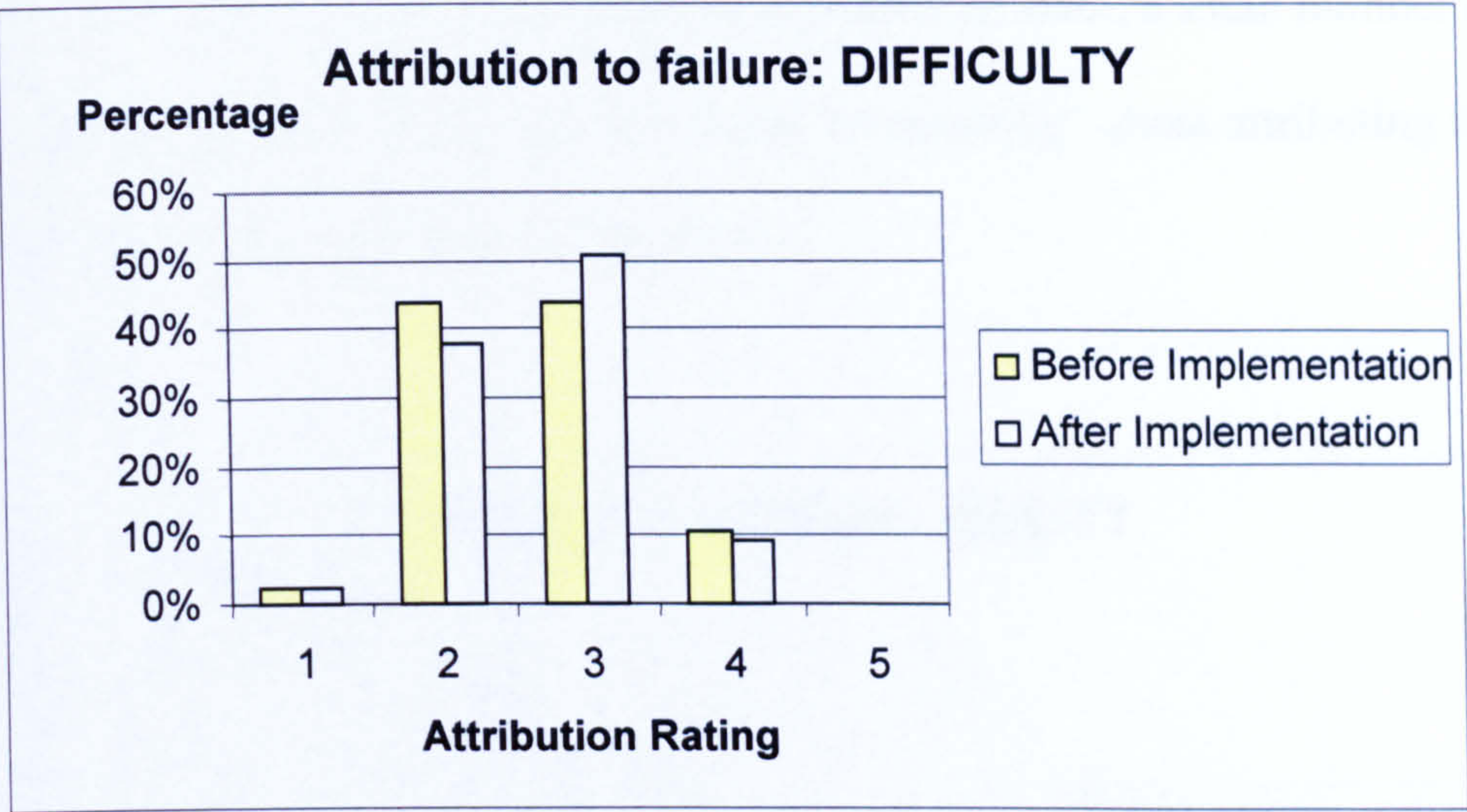
In graph 5.1 below, it is seen that after the implementation, the number of respondents disagreeing about attributing their failures to bad luck slightly decreased. Indecisive answers (rating 3) tended to increase.



Graph 5.1. Lack of luck as attribution to failure (N=85)

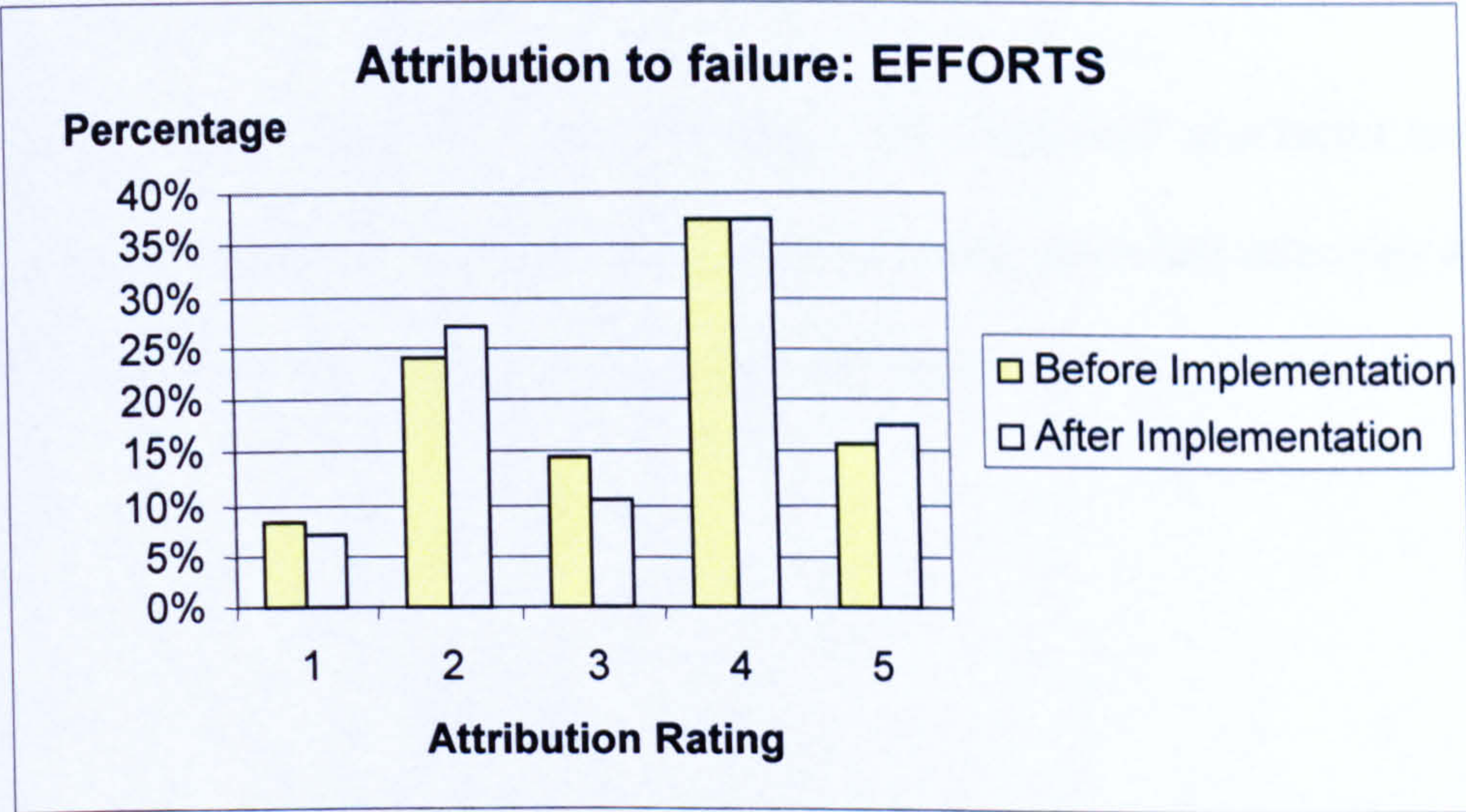
In Graph 5.2, it is seen that majority of the respondents seemed uncertain or more careful in attributing their failure to the difficulty of the task. Rating 3 was the highest, and after the implementation of the BSC the respondents seemed marginally more careful in attributing their failures to the difficulty of the task.





Graph 5.2. Difficulty as attribution to failure (N=85)

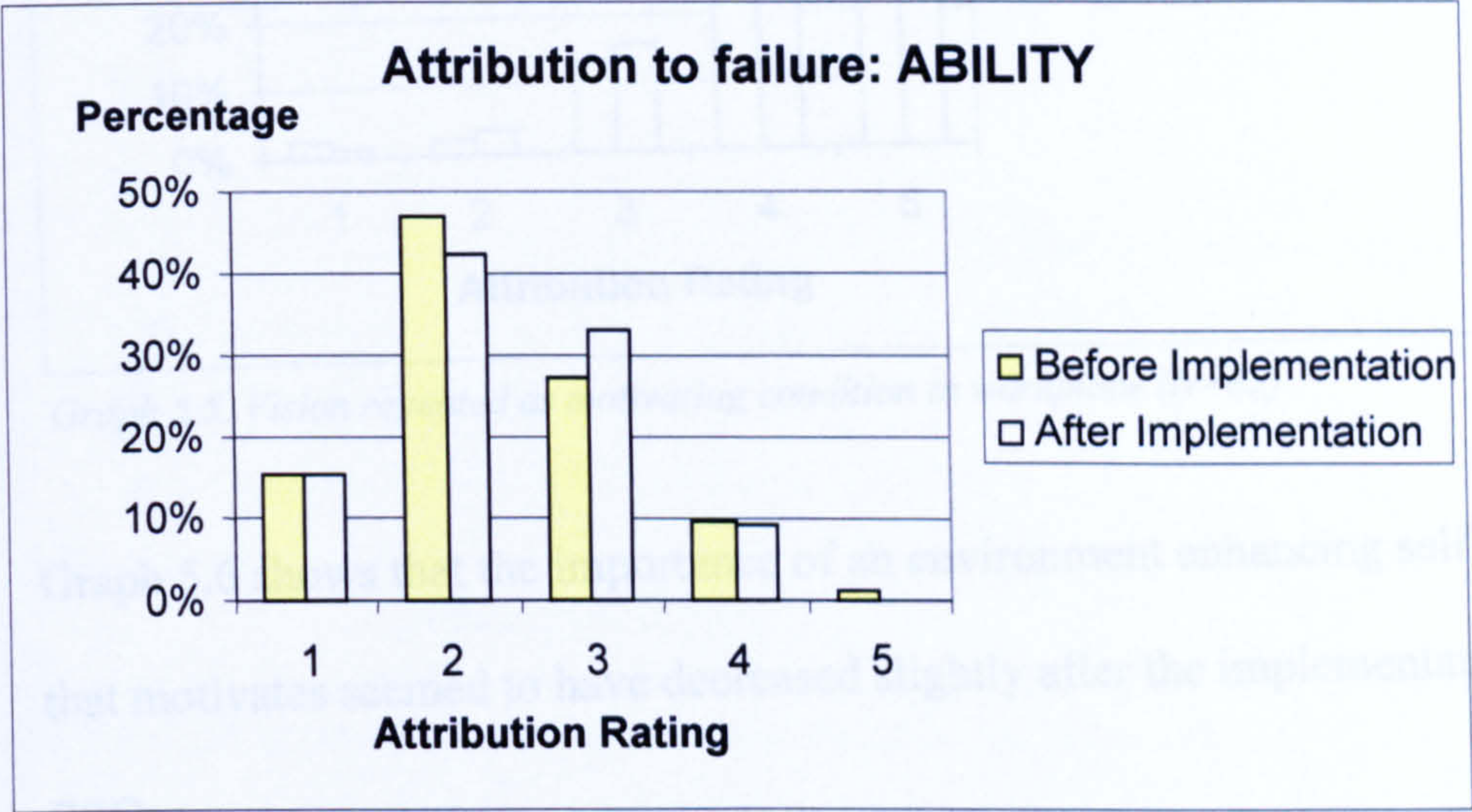
Graph 5.3 shows that attribution to effort was fairly stable before and after the implementation of BSC



Graph 5.3. Lack of efforts as attribution to failure (N=85)



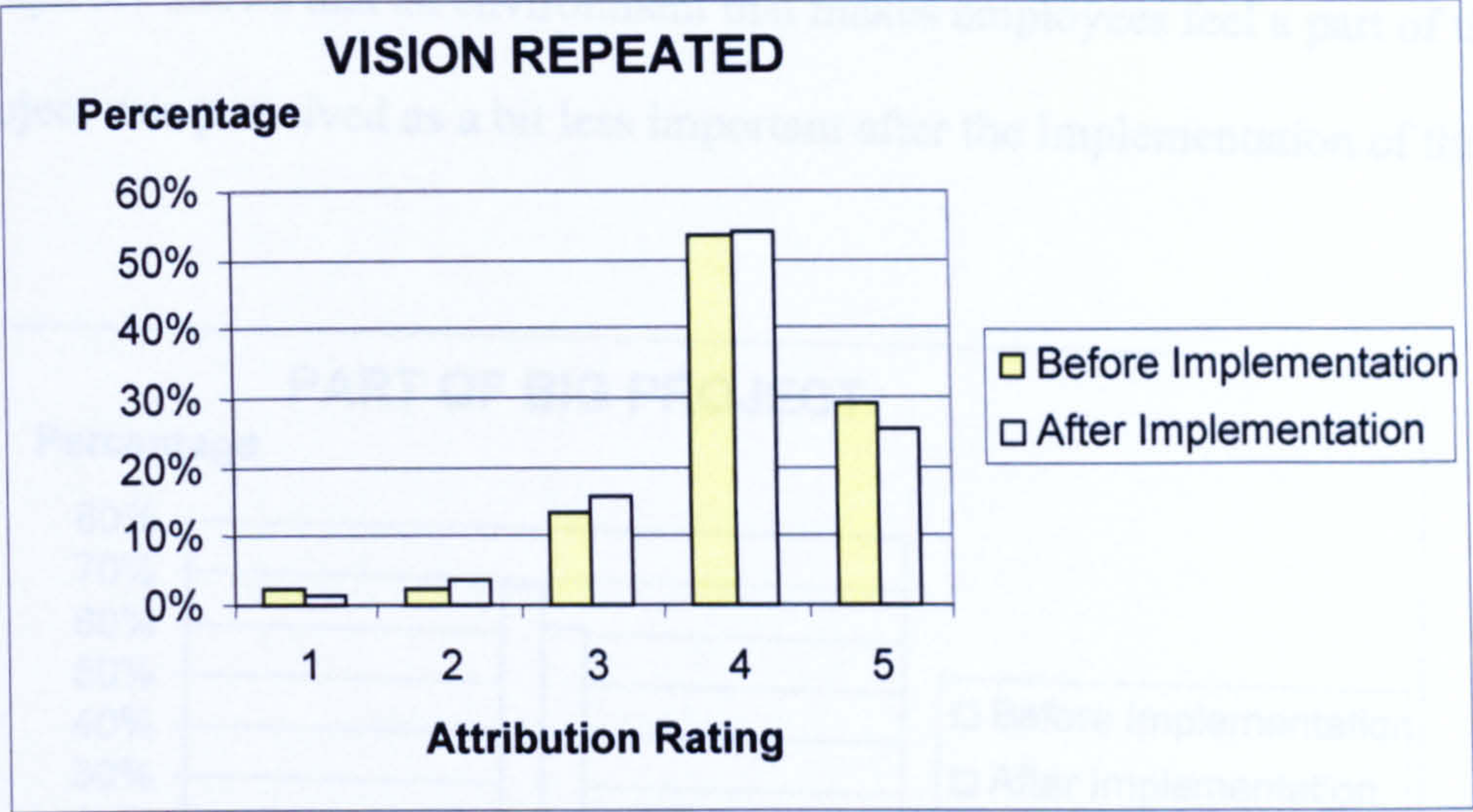
Graph 5.4 shows that after the implementation of BSC, a small number of respondents shifted their answers from “disagreeing” about attributing their failures to lack of ability to “depends.”



Graph 5.4. Lack of ability as attribution to failure (N=85)

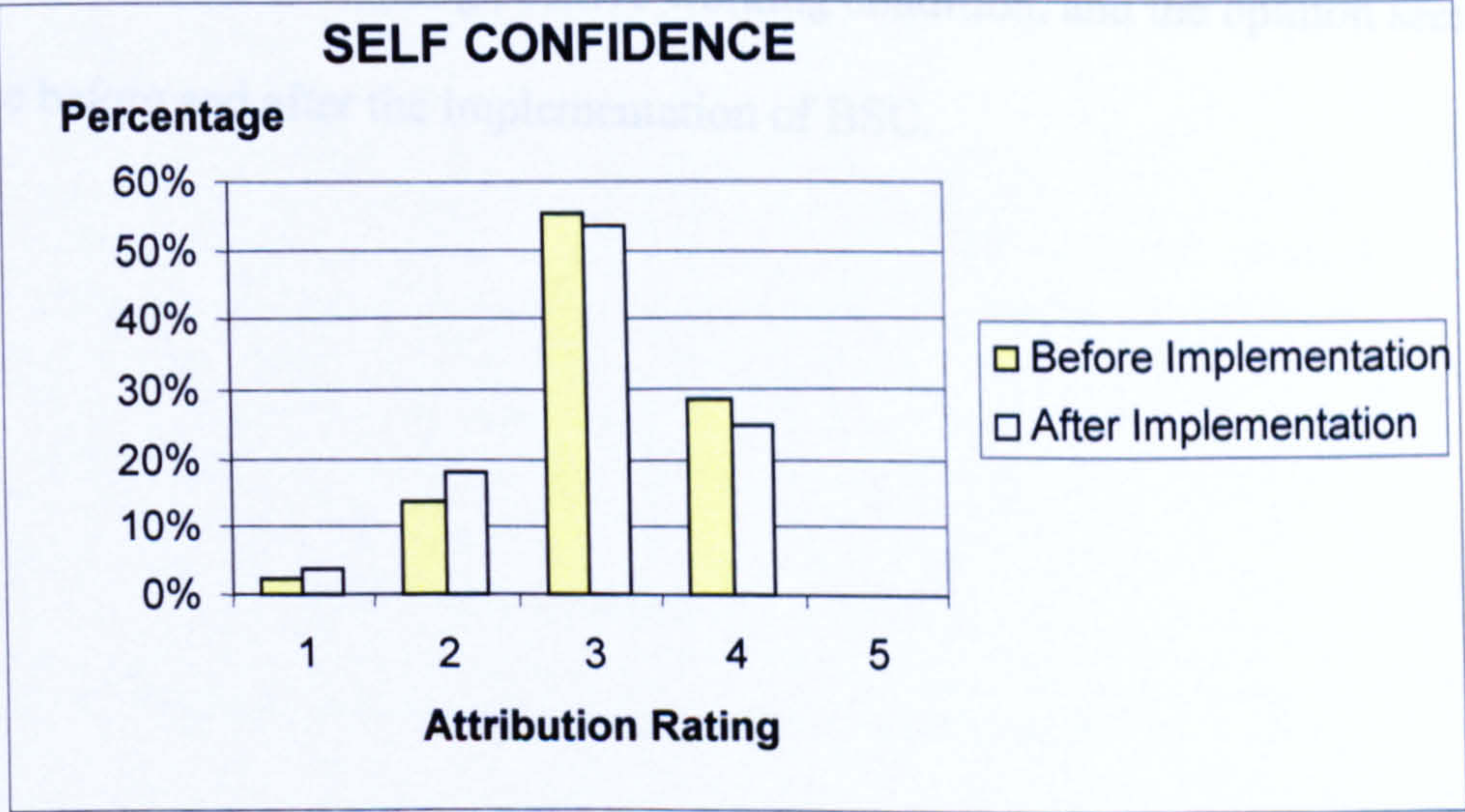
Graph 5.5 indicates that answers to the “vision repeated” as a factor creating positive working conditions that motivates employees were relatively stable before and after the implementation of the BSC.





Graph 5.5. Vision repeated as motivating condition in workplace (N=85)

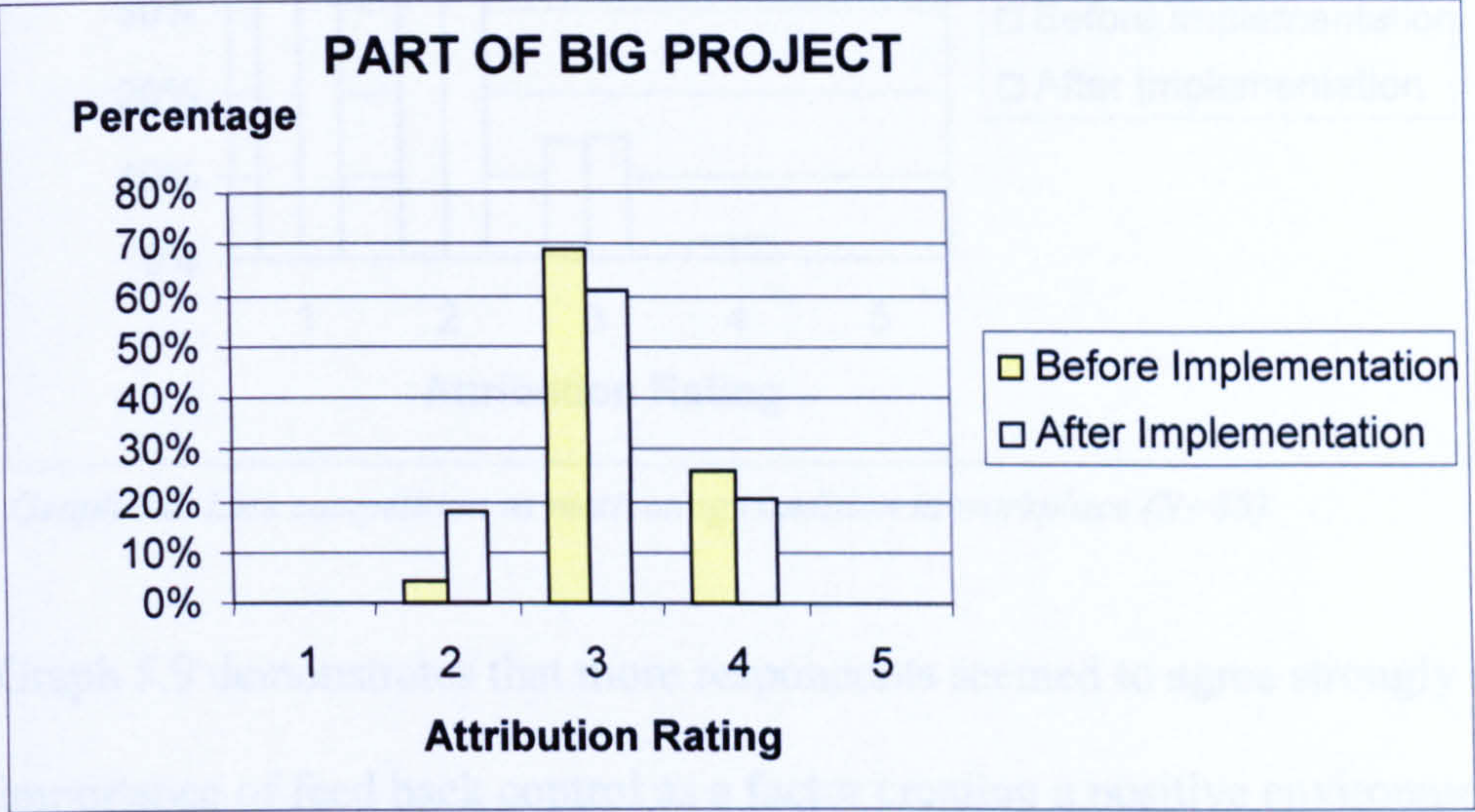
Graph 5.6 shows that the importance of an environment enhancing self confidence that motivates seemed to have decreased slightly after the implementation of the BSC.



Graph 5.6. Self confidence as motivating condition in workplace (N=85)



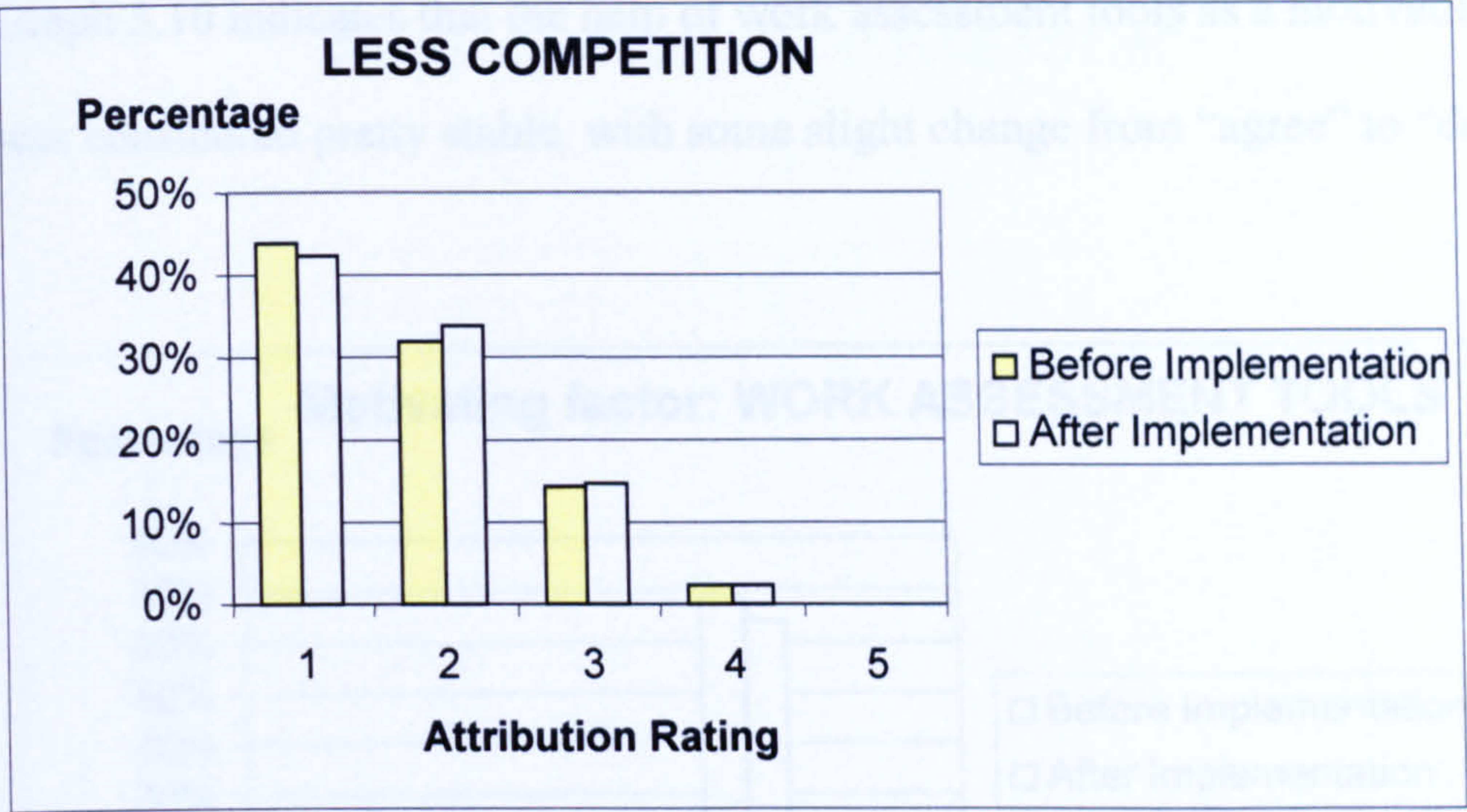
Graph 5.7 shows that an environment that makes employees feel a part of the big project was perceived as a bit less important after the implementation of the BSC.



Graph 5.7. Being part of the big project as motivating condition in workplace (N=85)

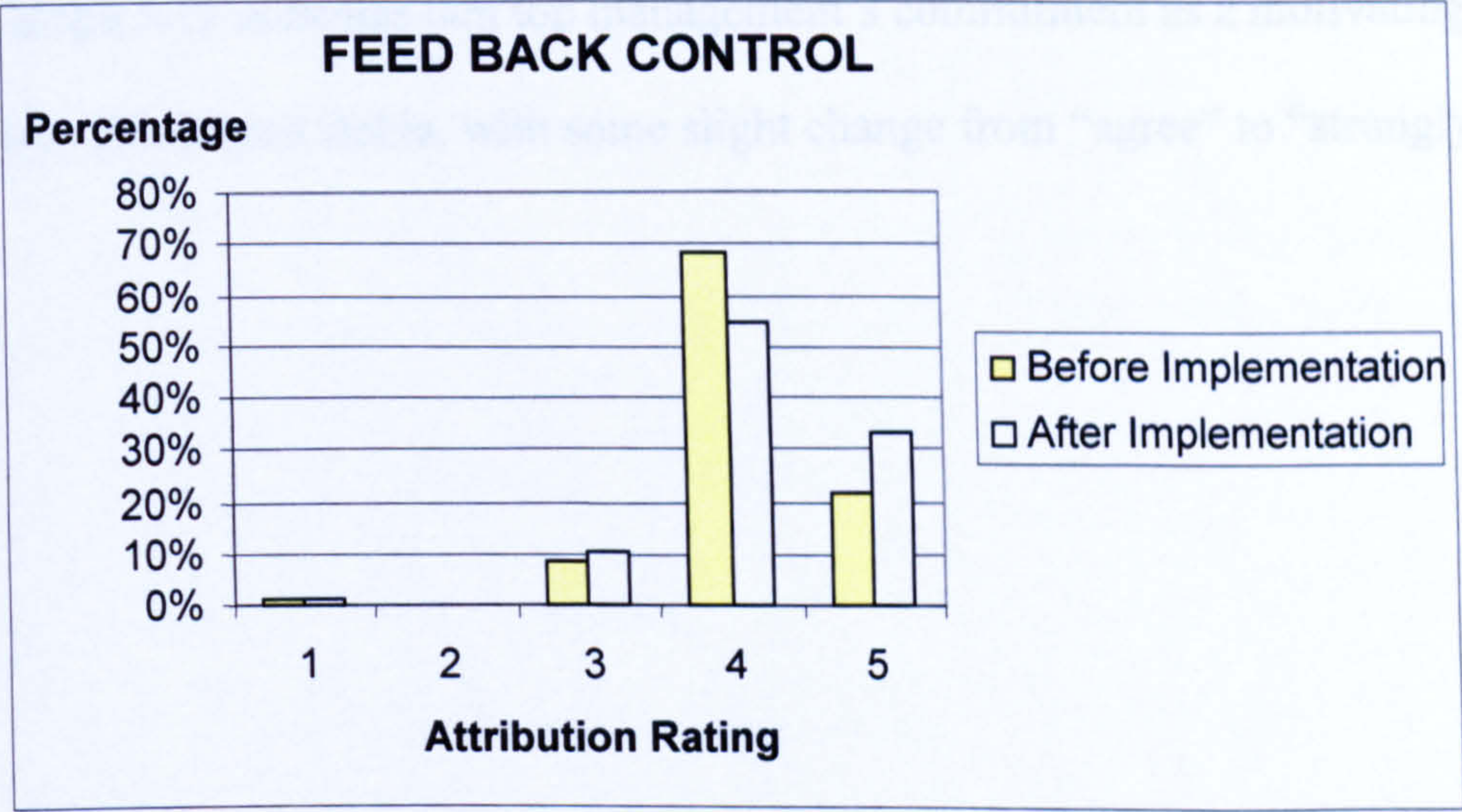
Graph 5.8 illustrates that less competition was not considered as important as other attributions in creating positive working condition, and the opinion seemed stable before and after the implementation of BSC.





Graph 5.8. Less competition as motivating condition in workplace (N=85)

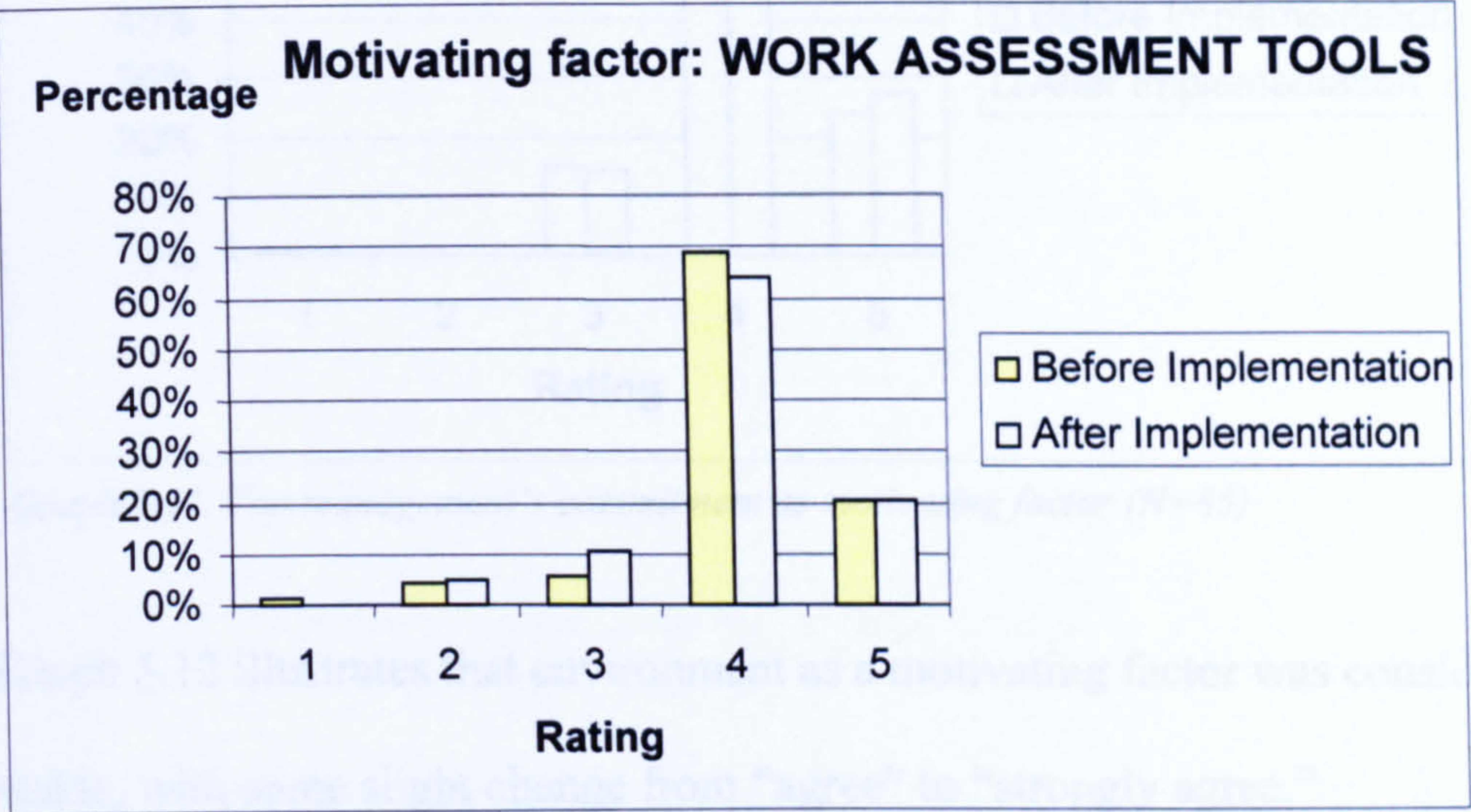
Graph 5.9 demonstrates that more respondents seemed to agree strongly with the importance of feed back control as a factor creating a positive environment after the implementation of the BSC.



Graph 5.9. Feedback control as motivating condition in workplace (N=85)



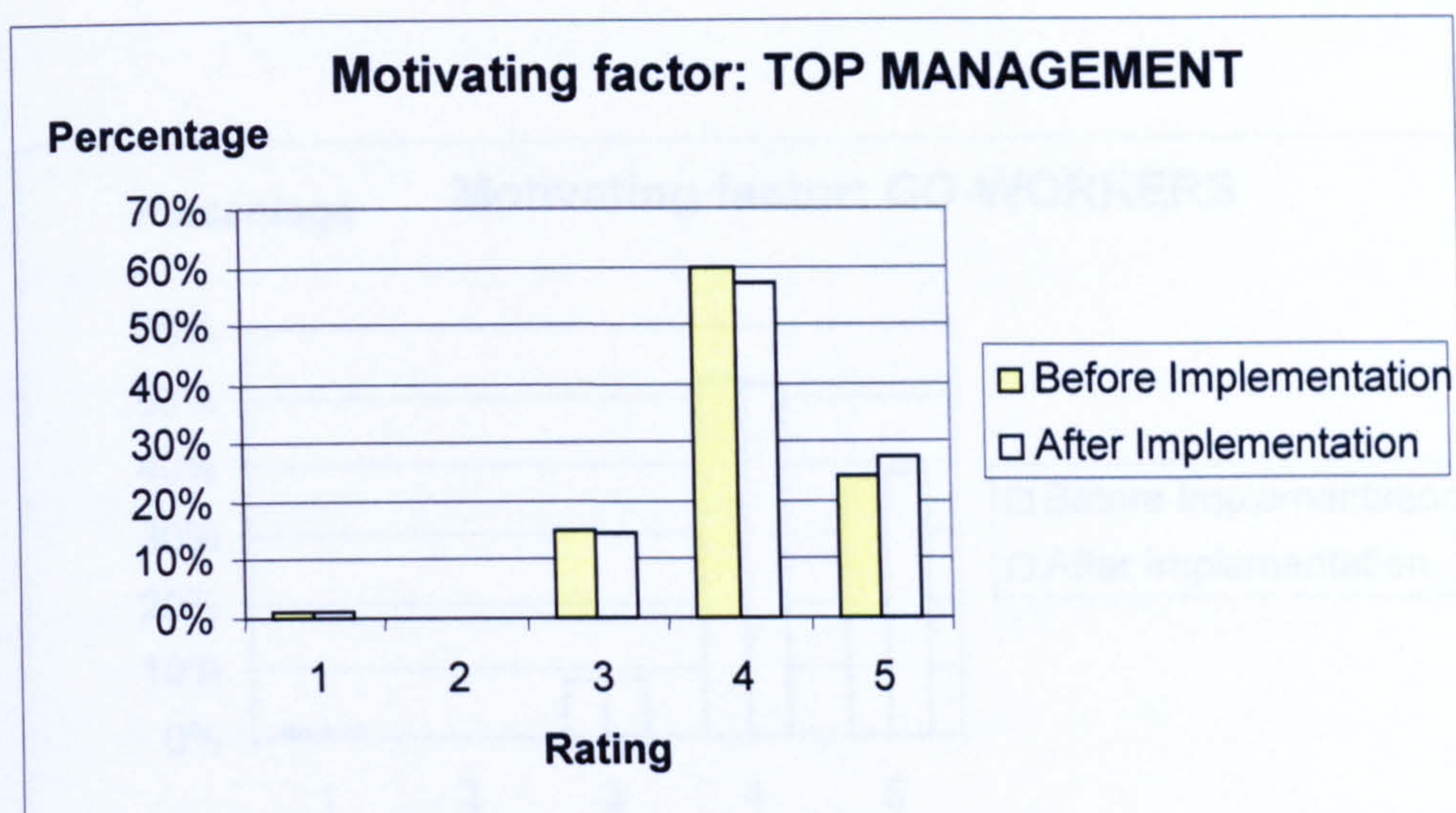
Graph 5.10 indicates that the help of work assessment tools as a motivating factor was considered pretty stable, with some slight change from “agree” to “depends.”



Graph 5.10. Tools as motivating factor (N=85)

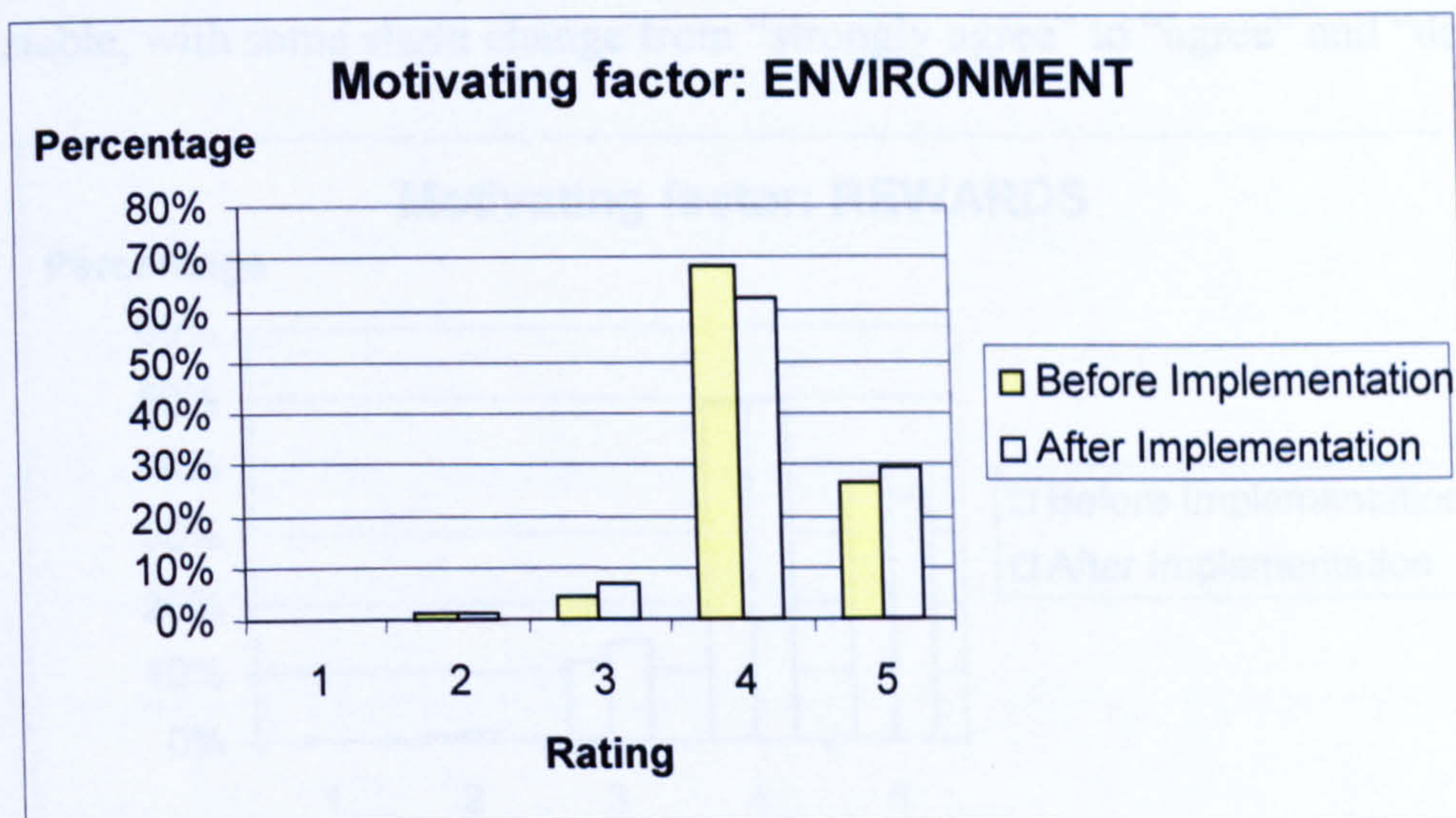
Graph 5.11 indicates that top management’s commitment as a motivating factor was considered stable, with some slight change from “agree” to “strongly agree.”





*Graph 5.11. Top management's commitment as motivating factor (N=85)*

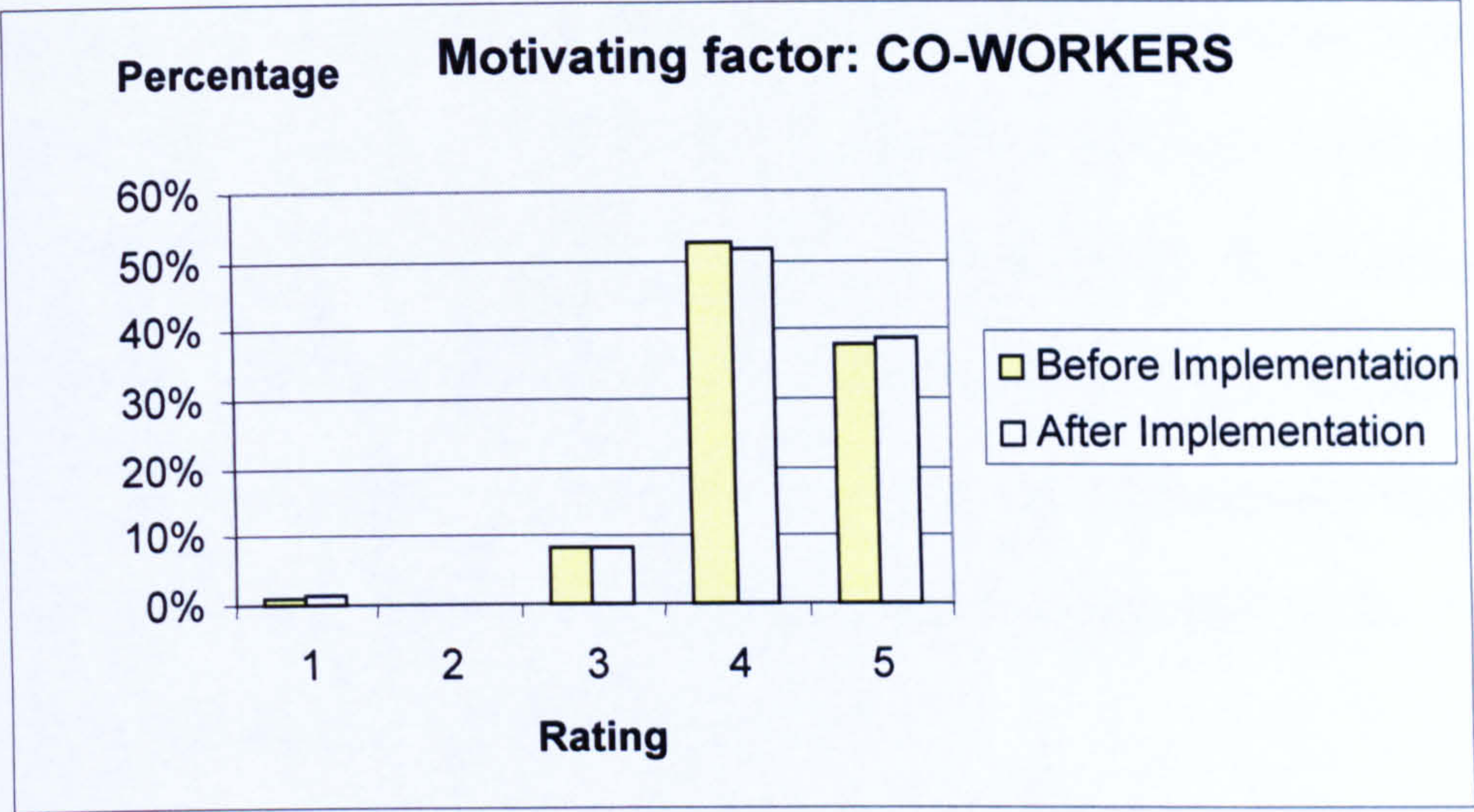
Graph 5.12 illustrates that environment as a motivating factor was considered stable, with some slight change from “agree” to “strongly agree.”



*Graph 5.12. Environment as motivating factor (N=85)*

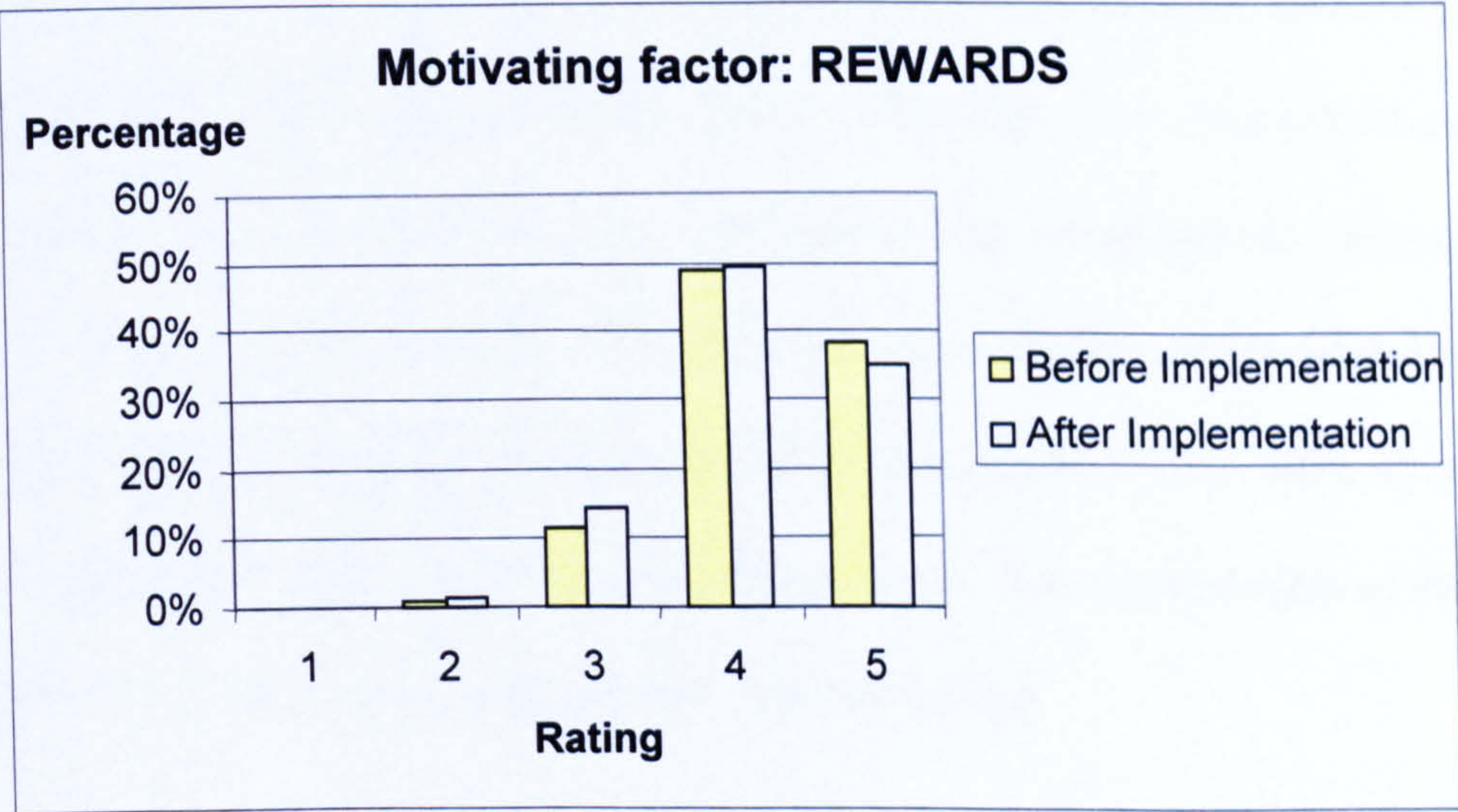
Graph 5.13 indicates that co-workers' support as a motivating factor was considered stable.





*Graph 5.13. Co-workers' support as motivating factor (N=85)*

Finally, graph 5.14 shows that rewards as a motivating factor were considered stable, with some slight change from “strongly agree” to “agree” and “depends.”



*Graph 5.14. Rewards as motivating factor (N=85)*



From the T-tests and the comparison of the results from questionnaires, it was shown that there was no significant change on motivational styles, preferences towards motivating working condition, and motivating factors before and after the implementation of the balanced scorecard. It is noteworthy that the respondents seemed to appreciate the balanced scorecard (or tool to help them align with the firm's goal) as a good motivating factor, as they rated "important" motivating factors in the pre-implementation questionnaires as "fulfilled" by the implementation of the balanced scorecard.

## 5.2 Focus Group Results

Before I conducted this study, I observed the working environment at IMT. As mentioned before, the firm continuously seeks new approaches and solutions to their rapidly changing operations. Currently the firm was using only the quantity of cars sold and customers' survey as performance measurement. During the observation, it was noticed that most of the sales persons were professional. They used semi-formal language when serving the customers. They were trying to personalize their relationship with the customers. The environment at the work place, the show room, was pleasant and welcoming.

The essence of the focus group was to brain-storm ideas about motivation and to supplement the questionnaires' results. The focus group participants were among

the respondents in the later study. One focus group was conducted with 12 participants selected randomly. The focus group was held twice, once before the balanced scorecard implementation, and once after. The focus group topics ranged from economic, political, cultural, and social conditions in Jakarta, Indonesia, leading to discussion about motivational style, working environment, and motivating factors.

Before I conducted the focus group, I informed the participants that this focus group would be part of my personal project so I hoped they would be as open as possible. It is interesting to find out that most of the focus group participants refer to Jakarta as urban as other big cities around the world, such as Hong Kong, New York, London, Sydney, and other cities known for their sprawling urban landscape. Jakarta is the nation's center for business, government, education, and cultural activities. However, when it comes to the quality of life, most of them complained about how crowded Jakarta was, and how exhausting it was to achieve a better quality of life. The discussion became more erratic when narrowed down to the quality of work life. Most of the participants regarded their remuneration as too low compared to those at the same level overseas. The level of employee satisfaction was quite low. Loyalty would depend on the circumstances. Most of them said they would consider migrating to other big cities outside Indonesia should they have the opportunity to do so. On the other hand, if there was no prospect of a job overseas, they would be more likely stay



working for this firm, as they considered it as quite prominent compared to other firms in Jakarta. The discussion about IMT as a learning organization revealed that the firm had revised its performance measurement system twice since it was formed. Formerly the firm used merely sales quantity in measuring the employees' performance. Currently it uses both sales quantity and customer survey to measure employees' performance. When asked about the performance measurement currently used, most of them referred to it both as "motivating" and as "depressing". They felt that the firm educated and disciplined them through this measurement. They felt the sales target might motivate them, as well as make them depressed. The customer survey, however, was considered somewhat "challenging," even though some of them complained about the reliability of the survey. However, they wondered if there were other more benevolent measurements available, measurements that were actually able to encourage them to perform their best, without causing them an "ulcer problem."

Table 5.11 below summarizes the focus group results before and after BSC implementation with 12 people in each group:

MOTIVATIONAL STYLE	Pre Impl	
	Post Impl	
Definition of failure		
not reaching the goal	7	7
when people look down on you	2	2
when your self esteem deteriorated	2	2
when you have bad luck	1	1
Factors causing personal failures		

bad luck	1	1
lack of effort	7	7
lack of intelligence	3	3
bad boss	1	1
<b>WORKING ENVIRONMENT</b>		
Effective working environment		
top management	5	5
coworkers	4	4
nice office	1	1
nice facility	1	1
safety	0	0
<b>MOTIVATING FACTORS</b>		
rewards	7	7
teamwork	3	3
recognition	2	2
<b>BALANCED SCORECARD</b>		
motivating		9
creating supporting environment		1
rewards tied to BSC		2

*Table 5.11. Focus Group Result (N=12)*

A majority gave the definition of failure as not reaching their goal, and recognized “lack of effort” as the main factor causing personal failures, and therefore on average, they were considered to be adopting an important characteristic of a mastery orientation motivational style; however, some believed intelligence would affect performance.

A majority of the respondents regarded the top management as the main factor in creating positive working conditions. The second most important factor was the



co- workers. They regarded “nice office,” “nice facility,” and “safety” as least important in creating a positive working environment. This is probably because their office was already pleasant, with good facilities, and effective health and safety policies.

When the discussion came to the topic of motivation, most of the members said the best motivator would be actual compensation in the form of cash. Good teamwork came in second place, and recognition was considered the least important in motivating them.

5.3 Interview Results

Interviews with the top management were done in a more informal way. Mr. W. Kurnia, the managing director of Indomobil Group was one of the interviewees. Indomobil group is the holding company of IMT. Two members of the board of executives of IMT were interviewed as well as twenty other respondents selected randomly among the respondents. Twenty three people were interviewed.

Table 5.12 below is the summary from analysis of interview data obtained, before and after the implementation of the balanced scorecard.

	Before	After	A-B
<b>MOTIVATIONAL STYLE</b>			
<b>Question 1</b>			
Who's responsible for national crises?			

<b>Answers</b>			
Government	4%	4%	0%
Situation	4%	4%	0%
International world	4%	4%	0%
IMF	17%	9%	-9%
Indonesian people	61%	70%	9%
Fate	9%	9%	0%
<b>Question 2</b>			
Who's responsible for firm's failure?			
<b>Answers</b>			
Top management	9%	9%	0%
All	43%	48%	4%
Government	39%	35%	-4%
Fate	9%	9%	0%
<b>Question 3</b>			
Who's responsible for own failure?			
<b>Answers</b>			
Bad luck	13%	13%	0%
Self	61%	61%	0%
Boss	17%	22%	4%
Coworkers	9%	4%	-4%
<b>Question 4</b>			
Does intelligence affect performance?			
<b>Answers</b>			
Yes	57%	43%	-13%
No	13%	4%	-9%
Sometimes	30%	52%	22%

## WORKING CONDITION

### Question 5

Best solution to improve?

#### Answers

Top management	35%	35%	0%
Coworkers	30%	30%	0%
Nice office	9%	9%	0%
Nice facility	13%	13%	0%
Safety	13%	13%	0%

## MOTIVATING FACTORS

### Question 6

What motivates the most?

#### Answers



Rewards	57%	57%	0%
Teamwork	26%	26%	0%
Recognition	17%	17%	0%
<b>Question 7</b>			
Does BSC motivate you?			
<b>Answers</b>			
Yes		78%	
No		4%	
Maybe		17%	
<b>Question 8</b>			
Does BSC create supportive environment?			
<b>Answers</b>			
Yes		87%	
No		4%	
Maybe		9%	
<b>Question 9</b>			
Is it wise to tie BSC and reward?			
<b>Answers</b>			
Yes		74%	
No		4%	
Maybe		22%	

*Table 5.12. Summary of interview result (N=23)*

The interviews revealed that most interviewees considered that the party responsible for the Indonesian crises was the Indonesian people. The party responsible for company failure was all stakeholders (even though government came in the second rank). Personal failure was most frequently attributed to the individual responsibility of each person. These results support the questionnaire results, stating that overall, the respondents adopted mastery orientation motivational style.

As for working conditions, the majority of the respondents regarded the top management as the main factor in creating positive working conditions. The second most important factors were “nice office” and “nice facility.”

The most motivating factor was reward, and the second most motivating was recognition. Meanwhile, teamwork was the least motivating factor. A majority of the respondents regarded the balanced scorecard as a good motivating factor creating supportive environment. They also thought it was wise to tie rewards to the balanced scorecard evaluation.

Regarding the respondents’ opinion about the implementation of the balanced scorecard, here are some actual comments:

TM1: “BSC provides guides to strategic direction.”

TM2: “With BSC, we can track progress over time.”

TM3: “My sales force now are aware of the firm’s strategy.”

R7: “My aim is clear with the direction of BSC.”

R89: “BSC measures facts, in reality unique circumstances might explain poor performance.”

R35: “BSC is too complicated for me, a lot of things to measure.”

In conclusion, there was no significance change in the respondents’ motivational styles, their preferences towards motivating working environment and motivating



factors, before and after the BSC implementation. Nevertheless, in the interview, it was also revealed that majority of the respondents regarded the balanced scorecard as motivating and creating motivating condition in the workplace.

### 5.4 Summary of Results

The results are summarized in Table 5.13 below.

	<b>Questionnaires</b> <i>Tables 5.1 to 5.10</i>	<b>Interviews</b> <i>Table 5.12</i>	<b>Focus Groups</b> <i>Table 5.11</i>
Motivational Style	<ul style="list-style-type: none"> <li>◇ 54% (56% after) adopted mastery oriented motivational style</li> <li>◇ 11% (9% after) adopted learned helpless</li> <li>◇ 3% (3% after) adopted self-worth</li> </ul>	<ul style="list-style-type: none"> <li>◇ On average, respondents adopted a moderately mastery orientation motivational style.</li> <li>◇ Some believed intelligence affected performance</li> </ul>	<ul style="list-style-type: none"> <li>◇ On average, respondents adopted a moderately mastery orientation motivational style.</li> <li>◇ Some believed intelligence affected performance</li> </ul>
Working Condition	<ul style="list-style-type: none"> <li>◇ Being part of the big project is the most important</li> <li>◇ Being able to oversee clearly the vision, healthy working climate enhancing their self-confidence, and feedback control are important</li> <li>◇ Competition is least important</li> </ul>	<ul style="list-style-type: none"> <li>◇ Majority of the respondents regarded the top management as the main factor in creating positive working condition.</li> <li>◇ The second most important factors were “nice office” and “nice facility.”</li> </ul>	<ul style="list-style-type: none"> <li>◇ Majority of the respondents regarded the top management as the main factor in creating positive working condition.</li> <li>◇ The second most important factor was the co-workers</li> <li>◇ The “nice office,” “nice facility,” and “safety” were</li> </ul>

			the least
Motivating factors	<ul style="list-style-type: none"> <li>◇ Support from co-workers was rated as the highest motivating factor</li> <li>◇ The reward promised by management was ranked the second highest.</li> <li>◇ The other three motivating factors; assessment and evaluation tool, management commitment, and positive corporate culture; were rated as important</li> </ul>	<ul style="list-style-type: none"> <li>◇ Reward was regarded as the most motivating factor</li> <li>◇ Teamwork was regarded as the second most motivating factor</li> <li>◇ Recognition was regarded as the least motivating.</li> </ul>	<ul style="list-style-type: none"> <li>◇ Reward was regarded as the most motivating factor</li> <li>◇ Teamwork was regarded as the second most motivating factor</li> <li>◇ Recognition was regarded as the least motivating.</li> </ul>
Balanced scorecard	<ul style="list-style-type: none"> <li>◇ Respondents agreed that balanced scorecard motivated them, but was not as motivating as co-workers' support and other things such as top management commitment, environment and rewards</li> </ul>	<ul style="list-style-type: none"> <li>◇ Majority of the respondents regarded the balanced scorecard as a good motivating factor creating supportive environment.</li> <li>◇ They also thought it was wise to tie reward to the balanced scorecard evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>◇ Majority of the respondents regarded the balanced scorecard as a good motivating factor creating supportive environment.</li> <li>◇ They also thought it was wise to tie reward to the balanced scorecard evaluation.</li> </ul>

*Table 5.13 Summary of Results*



Looking at the summary of results, it can be concluded that:

- On average, the respondents adopted a moderately mastery orientation motivational style.
- Good working condition can be created if the top management is committed to share their vision to make the employees feel part of the big project. Supportive co-workers also contributed to good working conditions. Meanwhile, a nice office and facilities were regarded as less important. In general, competition was regarded as not important in creating good working condition.
- The best motivating factor was economic rewards. Skillful teamwork came in second place. Recognition was considered the least motivating.
- There was no significant difference between the results before and after the balanced scorecard implementation
- Majority of the respondents regarded the balanced scorecard implementation as creating motivating conditions in the workplace.

The results reflected the condition of Indonesians generally. Hofstede (2001) conducted a comprehensive study covering 74 countries in the world. He developed a model that identifies five primary Dimensions to assist in differentiating cultures: Power Distance - PDI, Individualism - IDV, Masculinity - MAS, Uncertainty Avoidance – UAI, and Long-Term Orientation – LTO.

According Hofstede's (2001) study, Indonesia has one of the lowest world ranking for individualism with a score of 14 (of 100), compared to the greater Asian rank of 23, the world rank of 43, the USA rank of 91, and the UK rank of 89. The score on this dimension indicates that Indonesian society is collectivist as compared to individualist. As collectivists, Indonesian people tend to depend on other people for support. Therefore, peer and management support was considered important for them. However, competing with colleagues might be regarded as "not appropriate" in a collectivist society like Indonesia. The majority of the respondents refer to *less competition* as an unimportant motivating condition in the workplace. Based on Hofstede's (2001) study, Indonesia's ranking of Power Distance (PDI) is 78. It is extremely high compared to mean power distance for the greater Asian countries (71) and the world's (55). This indicates a high level of inequality of power and wealth within the society. This condition might cause the respondents to think it would be improper to "admit" the importance of "competition" in enhancing motivation. That does not mean that there was no competition in the Indonesian workplace. Competition was in the air, it was just not revealed straightforwardly. This might be different in western culture where people openly compete with each other. Take America for example. LeClaire (2003) pointed out that according to a survey conducted by Accountemps, fifty-five percent of executives surveyed recently said competition among co-workers is more prevalent now than it was 10 years ago. The survey included responses from 150 executives with 1,000 of America's largest companies. On the other



hand, in a collectivist country like Indonesia, collectivism is manifest in a close long-term commitment to the member 'group', such as family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and overrides most other societal rules and regulations. The society fosters strong relationships where everyone takes responsibility for fellow members of their group. Therefore, competition is the least appropriate thing to show in Indonesian society. This also might explain why an environment with less competition was not considered as an important motivating condition in the workplace while peer support was considered a very important motivating factor.

## **Chapter Six**

### **Results 2:**

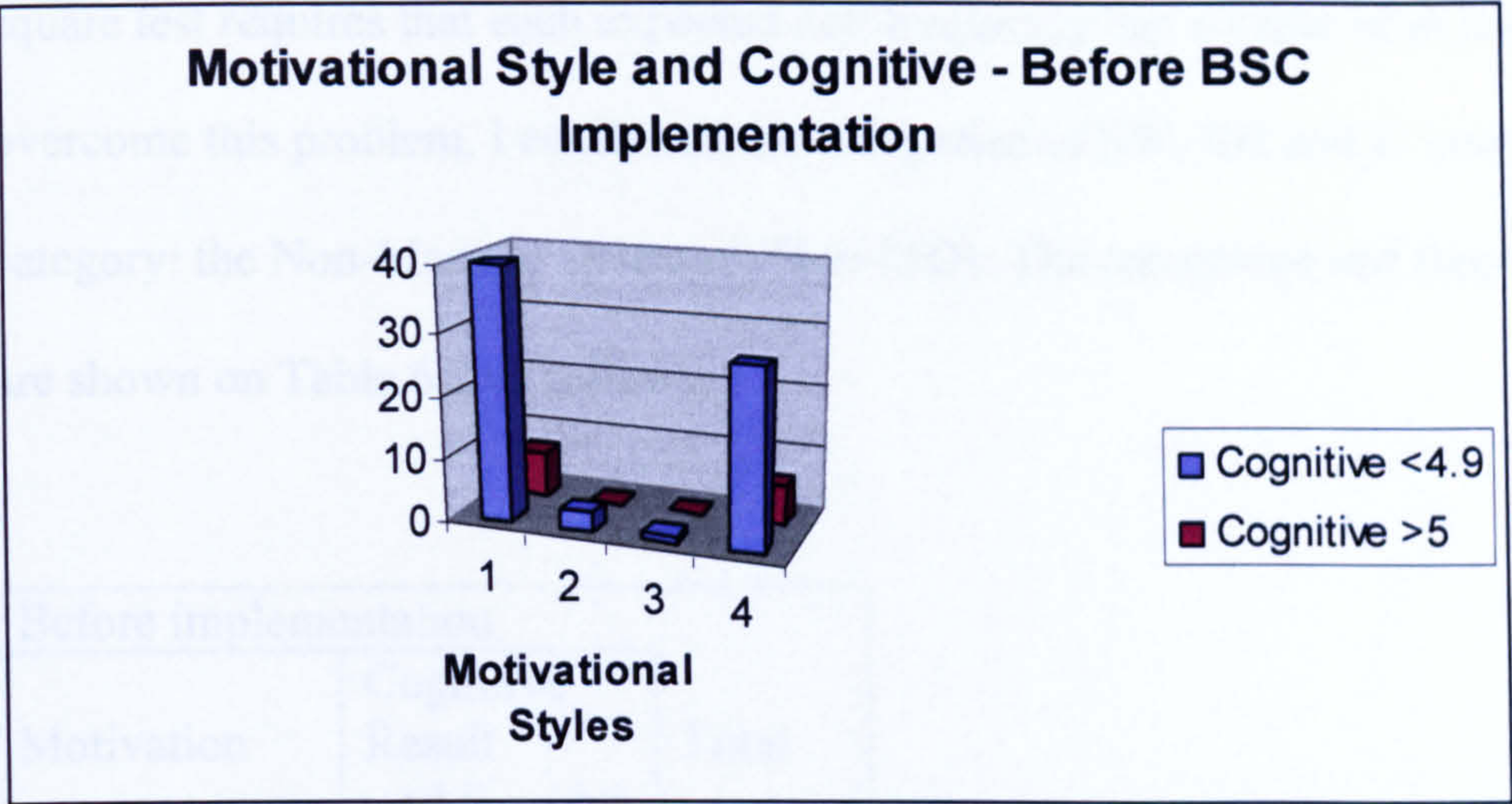
## **Motivation, Level of Cognitive Ability, and Performance in Indonesian Cultural Context**

### **6.1 Motivation and Level of Cognitive Ability**

A majority of the respondents claimed that they were adopting a mastery oriented motivational style. Possible scores on the critical reasoning tests varied from (1) to (10). It was shown that individuals with maladaptive motivational style were not necessarily lower in cognitive ability. The highest score in the first critical reasoning tests (6.5) was reached by respondents number R95 and R97, while only respondent number R97 adopted a strong mastery oriented motivational style. Meanwhile, respondents number R5, R58, R67, R86, and R90 with mastery oriented motivational style did pretty badly in the critical reasoning tests before the balanced scorecard implementation. In the critical reasoning tests after the implementation of the balanced scorecard, respondents number R5, R58, R67 and R90 increased their score while respondent number R86 stayed the same.

Graph 6.1 below shows the distribution of critical reasoning test scores on motivational styles before the BSC implementation.





*Graph 6.1 Distribution of critical reasoning test scores on motivational styles before the BSC implementation*  
*Motivational style 1 was the mastery orientation, 2 was the self-worth, 3 was the learned helpless, and 4 was the undetected.*

I ran a chi-square test to test for was any association between motivational styles and level of cognitive ability. The null hypothesis of the chi-square was that there is no association between the level of cognitive ability and the adoption of motivational style. In table 6.1 below, I categorized the respondents' motivational styles based on their scores on the first set of critical reasoning tests, (calculation of scores is explained in chapter 4, section 4.5)

Before implementation		
Motivation	Cognitive Result	
	<4.9	>5
Mastery Oriented (MO)	40	7
Self Worth (SW)	3	0
Learned Helpless (LH)	1	0
Undetected (U)	28	6

*Table 6.1 Motivational styles and level of cognitive ability, before the BSC implementation (N=85)*

In running a chi-square test, I faced a minor problem. Two of the expected cell frequencies (SW and LH) had a value of less than 5, while proper use of the chi-



square test requires that each expected cell frequency has a value of at least 5. To overcome this problem, I combined the categories of SW, LH and U into one category: the Non-Mastery Oriented (Non-MO). The categories and frequencies are shown on Table 6.2 as follows.

Before implementation			
Motivation	Cognitive Result		Total
	<4.9	>5	
MO	40	7	47
Non MO	32	6	38
Total	72	13	85

Table 6.2 Motivational styles and level of cognitive ability, before the BSC implementation, combined category (N=85)

In Table 6.3 below, I calculated the expected frequencies before implementation of the balanced scorecard, based on the formula for independent sample.

Expected Before Implementation			
Motivation	Cognitive Result		Total
	<4.9	>5	
MO	39.81	7.19	47
Non MO	32.19	5.81	38
Total	72	13	85

Table 6.3 Expected frequencies of Motivational styles and level of cognitive ability, before the BSC implementation (N=85)

The calculation of chi-square is shown in Table 6.4 below.



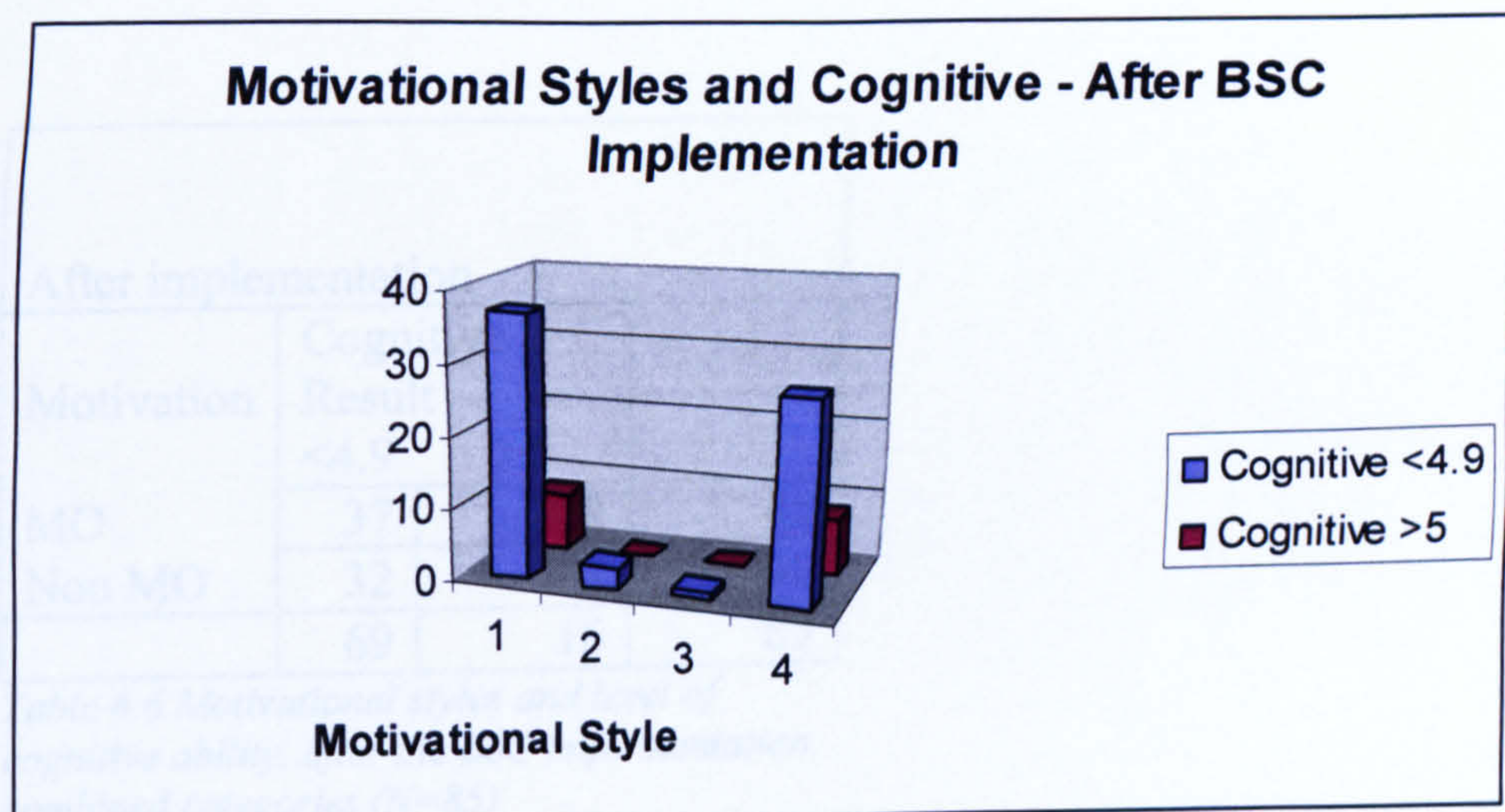
Calculation of chi-squared		
	<4.9	>5
MO	0.035	0.035
Non MO	0.035	0.035
Chi squared = 0.14		
Critical value at .05 probability level with 1 d.f 3.84		

Table 6.4 Calculation of chi-square on motivational styles and level of cognitive ability, before the BSC implementation (N=85)

The observed chi-square was 0.14. The critical value of chi-square at 0.05 probability level with one degree of freedom is 3.84. It was obvious that the observed chi-square value was lower than the critical value of 3.84. Therefore the null hypothesis was accepted, meaning that before the implementation of the balanced scorecard, cognitive ability appears to be independent of the respondents' motivational styles.

After the balanced scorecard implementation, the distribution of critical reasoning test scores on motivational styles is described in Graph 6.2 as follows.





Graph 6.2 Distribution of critical reasoning test scores on motivational styles after the BSC implementation  
 Motivational style 1 was the mastery orientation, 2 was the self-worth, 3 was the learned helpless, and 4 was the undetected.

The categories of respondents based on their motivational styles and cognitive test results after the BSC implementation are described in Table 6.5 as follows.

After implementation		
Motivation	Cognitive Result	
	<4.9	>5
MO	37	8
SW	3	0
LH	1	0
U	28	8

Table 6.5 Motivational styles and level of cognitive ability, after the BSC implementation (N=85)

Another chi-square test was done on the data after the implementation of the balanced scorecard. The same problem occurred, as the expected cell frequencies (SW and LH) also had a value of less than 5. I did the same category combination as I did in the first chi-square test. I combined the result categories of SW, LH and U into one category: the Non-Mastery Oriented (Non-MO). The categories and frequencies are shown on Table 6.6 as follows.



After implementation			
Motivation	Cognitive Result		
	<4.9	>5	
MO	37	8	45
Non MO	32	8	40
	69	16	85

Table 6.6 Motivational styles and level of cognitive ability, after the BSC implementation, combined categories (N=85)

The expected distribution of chi-square after the implementation is shown in Table 6.7 below, based on the formula for independent sample.

Expected After Implementation			
Motivation	Cognitive Result		Total
	<4.9	>5	
MO	36.53	8.47	45
Non MO	32.47	7.53	40
Total	69	16	85

Table 6.7 Expected distribution of motivational styles and level of cognitive ability, after the BSC implementation (N=85)

Table 6.8 shows the calculation of the observed chi-square after the BSC implementation.

Calculation of chi-squared			
	<4.9	>5	
MO	0.22	0.22	
Non MO	0.22	0.22	
Chi squared =			0.88
Critical value at .05 probability level with 1 d.f			3.84

Table 6.8 Calculation of chi-square on motivational styles and level of cognitive ability, after the BSC implementation (N=85)

The observed chi-square (0.88) was far below the critical value of chi-square at the level of probability of 0.05 with one degree of freedom (3.84). Therefore, the null hypothesis was accepted, and cognitive ability appeared to be independent of respondents' motivational styles.

From those two chi-square tests, it appeared that respondents with mastery orientation and maladaptive motivational style obtained low and high scores from the critical reasoning tests. The scores cannot be associated with motivational style adoption. Therefore, there is no valid association on this evidence between motivation and level of cognitive ability.

## 6.2 Level of Cognitive Ability and Performance

The respondents filling out the questionnaires were middle level managers in the sales force, with no control group, and were given two sets of critical reasoning tests. The first critical reasoning test was given before the BSC implementation and the second critical reasoning test was performed subsequent to the balanced scorecard implementation and the respondents' performance evaluation based on it. Of the ninety-seven respondents, twelve had resigned. Their withdrawal from the firm happened during the tests. It was shown that the highest score in test A2 was 10, achieved by respondents number R95 and R97. These two respondents achieved the same perfect score in test A1 as well. Respondent number R97 reached the highest BSC performance measurement of 99, but respondent number R95's score was lower. Respondents with low scores on critical



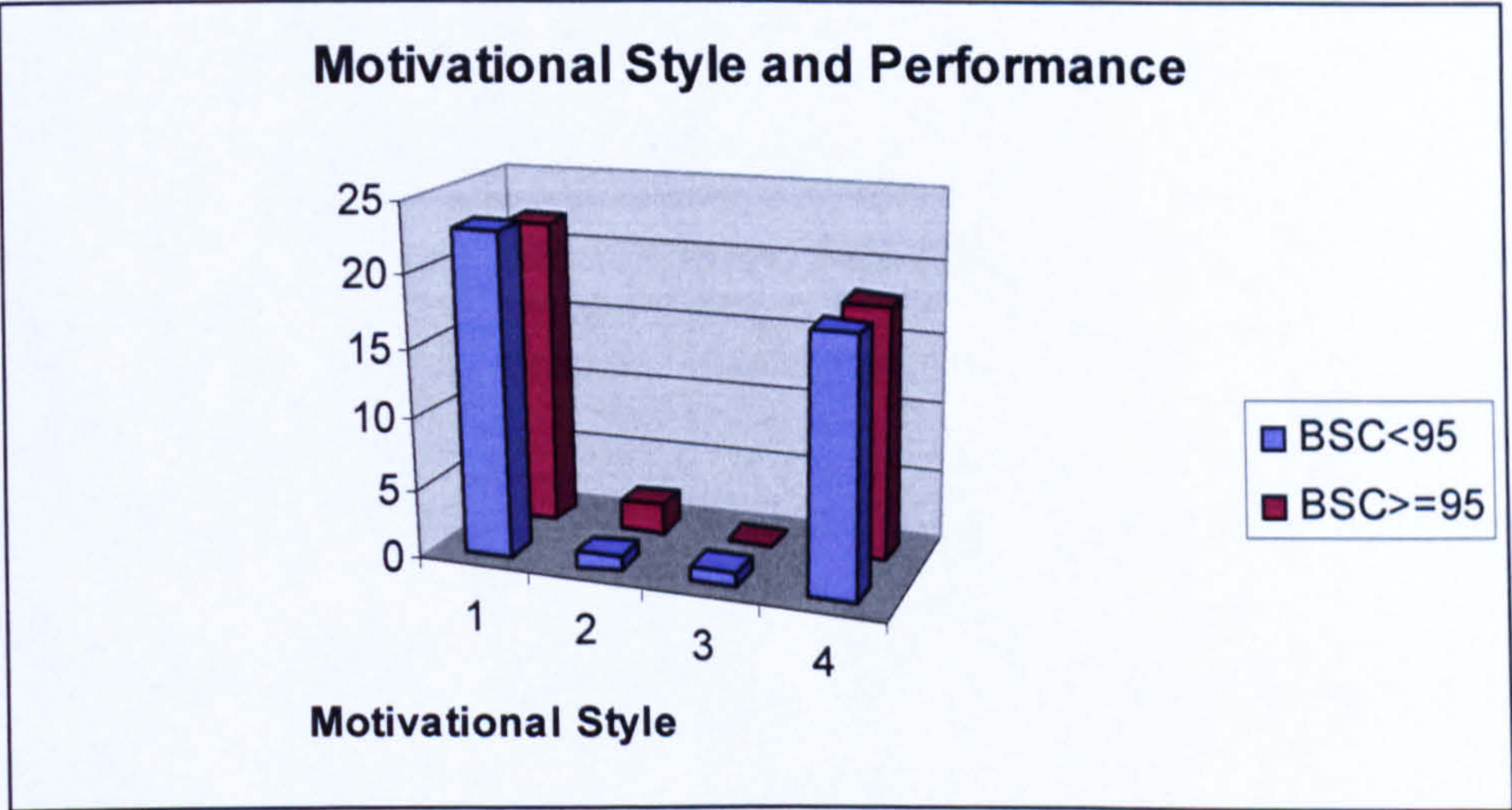
reasoning tests did not necessarily gain a low BSC performance score. Take respondents number R5, R51, R57, R58, and R74; their BSC performance was excellent, but their critical reasoning test results were relatively low. Based on the mean scores, the test results after the implementation of the balanced scorecard increased on test A, but decreased on test B. The evaluation of performance based on the balanced scorecard happened at the same time as the second critical reasoning test was taken. Looking at the mixed results of the critical reasoning tests, it appeared that the implementation of the balanced scorecard had no impact on their performance on tests of cognitive ability. The coefficient of correlation of performance and critical reasoning results before the balanced scorecard implementation was -0.16, and after the implementation of balanced scorecard was -0.17 with a perfect positive correlation of +1, negative perfect correlation of -1, and perfect no-correlation of zero. This showed that there was no strong correlation between performance and cognitive ability.

### 6.3 Motivation and Performance

Looking at the average performance of all respondents measured by the balanced scorecard, it is clear that the motivational styles as measured here have no systematic relationship with respondents' performance. The highest performance result was reached by individuals not adopting strong mastery oriented motivational style. They were respondents number R1, R8, R17, R25, R33, R55, R60, R61, and R74. This finding does not support Smith *et.al*'s (2003) finding. In their study, they found a possible functional relationship between sales performance and factors relating to individual motivation. Their general idea was



that motivation is the one critical item affecting sales performance and that resistance to change and an organization's structure and strategy directly affect motivation. There is no evidence of this in the present study, where all of my respondents were members of the sales force. Some respondents with maladaptive or unclear motivational style outperformed mastery oriented respondents and vice versa. This implies that there are complex factors affecting the respondents' sales performance other than motivational styles as measured here. Graph 6.3 below shows the distribution of performance results on motivational styles after the implementation of the balanced scorecard.



Graph 6.3 Distribution of performance results on motivational styles after the BSC implementation  
Motivational style 1 was the mastery orientation, 2 was the self-worth, 3 was the learned helpless, and 4 was the undetected.

To strengthen my tentative conclusion, I ran a chi-square test to show whether there was any association between motivational styles and performance. Table 6.9 below shows the categories of motivational styles and performance. Since all of the respondents had satisfied the minimum standard of performance already, I



divided performance into two categories, the excellent performance ( $\geq 95$ ) and the good performance ( $< 95$ ).

Motivation	BSC performance	
	$< 95$	$\geq 95$
MO	23	22
SW	1	2
LH	1	0
U	18	18

Table 6.9 BSC performance and Motivational styles (N=85)

As I did before, in Table 6.10 below, I categorized the LH, SW, and U motivational styles as “non MO” to be able to run the chi-square test.

Motivation	BSC performance		
	$< 95$	$\geq 95$	
MO	23	22	45
Non MO	20	20	40
	43	42	85

Table 6.10 BSC performance and Motivational styles, combined categories (N=85)

The calculation of the expected value of the chi-square distribution can be seen in Table 6.11 below.

Expected After Implementation			
Motivation	BSC performance		Total
	$< 95$	$\geq 95$	
MO	22.76	22.24	45
Non MO	20.24	19.76	40
Total	43	42	85

Table 6.11 Expected frequencies of chi-square on BSC performance and Motivational styles (N=85)

Table 6.12 shows the calculation of chi-square test on BSC performance and motivational style.

Calculation of chi-squared		
	<95	>=95
MO	0.06	0.06
Non MO	0.06	0.06
Chi squared =		0.22
Critical value at .05 probability level with 1 d.f		3.84

Table 6.12 Calculation of chi-square on BSC performance and Motivational styles (N=85)

The observed chi-square (0.22) was far below the critical value of chi-square at the level of probability of 0.05 and one degree of freedom (3.84). Therefore, the null hypothesis was accepted, and BSC performance appeared to be independent of respondents’ cognitive ability. However, statistics never prove anything. They merely provide evidence in support (or not) of hypothesis.

## 6.4 Conclusion

### Motivational Styles in Organization

Motivation is a multifaceted matter. It cannot merely be controlled by manipulating the environment. No single method is sufficient to explain the complexity of motivation and how people adopt different motivational styles. It is reasonable that Galloway and Leo (1996) regard motivational style more as a product of situational than individual variables. The results of this study found no evidence that motivation has any valid association with either performance or level of cognitive ability. Nevertheless, motivational style adoption is not that simple. According to AimÉ *et.al*’s (2000) findings, motivational styles were related to marital satisfaction. I did not search for this evidence in my study. An



even more interesting research result by Movius *et.al* (2004) found evidence that one's motivational style is determined by the anatomy of one's body. This was far beyond the scope of my study. After all, as Dodge *et al* (1989) concluded, people pursue many goals simultaneously, and these goals shape their specific adoption of motivational styles.

# **Chapter Seven**

## **Discussion and Conclusions**

### **7.1 Overall Review**

This chapter discusses the results in chapters 5 and 6 and their limitations, and makes recommendations for further study and for the improvement of motivating efforts in the work place. It concentrates on how, in an Indonesian business setting, the top management may motivate the organization's members with the help of a tool, the balanced scorecard.

### **7.2 Summary of Findings**

In an Indonesian business setting, my study attempted to find the most motivating factors as seen by employees. I also tried to find the associations between the balanced scorecard as an independent variable with two dependent variables: motivation and performance. In addition, I attempted to find an association between cognitive ability as a moderating variable with those dependent variables. In explaining the process in my framework, I tried to analyze it by dividing into three main issues, the motivational drivers in Indonesian business setting, the impact of the balanced scorecard on motivation,



and the association between motivation, level of cognitive ability and performance. Chart 7.1 reproduces the framework of the study as seen in Chart 4.1.

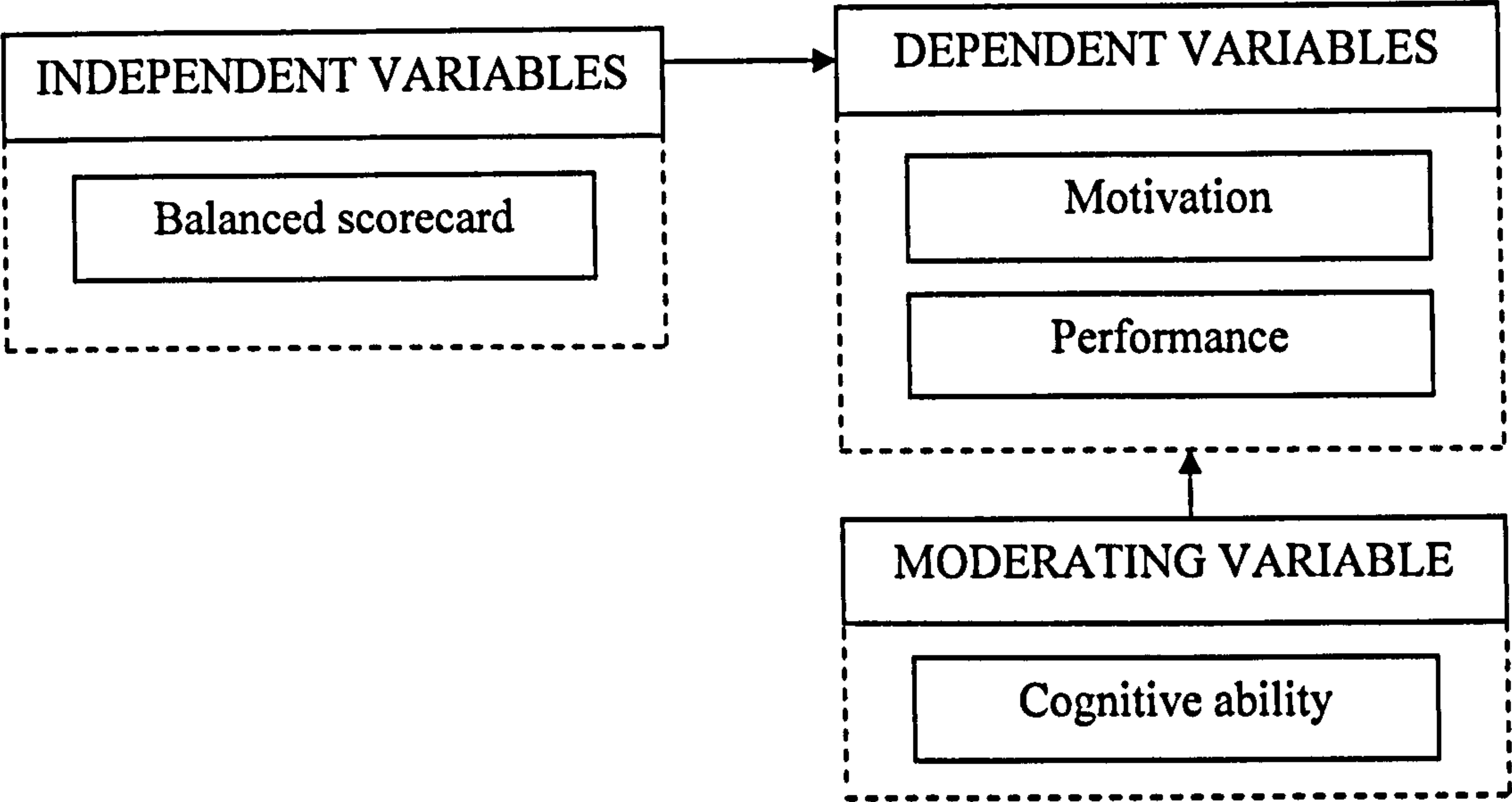


Chart 7.1 Framework of Study

7.2.1 Motivational drivers in Indonesian business setting

The most motivating factor considered by the respondents in my study was *economic rewards*. *Supportive teamwork* was regarded as the second most motivating. *Recognition* was less motivating. *Competition* was not regarded as an important motivating factor. The findings may be explained by considering the construct of motivation and cultural influence. According to Hofstede’s (2001) study, Indonesia has *power distance (PDI)* as its highest ranking dimension at 78 out of 100. The high *power distance (PDI)* is an indicator of a high level of inequality of power and wealth within the society. This condition is not necessarily forced upon the population, but rather accepted by the society as part

of their cultural heritage. The average *power distance* for the greater Asian countries is 71. This might explain why in my study all respondents regarded *economic rewards* as highly motivating. Wealth is a tool to gain power. Once a person was wealthy, he would gain all the power. Wealth is considered extraordinarily important among the poor in Indonesian society. Therefore, the assumption of instrumental (economic) rewards as a motivating source introduced first by Barnard (1938) is likely to be valid in Indonesian society. Katz and Kahn (1978) also argued that external economic rewards were the bases of motivation. In addition, according to Etzioni (1975), instrumental motivation was widely thought to be universal, because humans innately desire favorable rewards. This finding seemed to overlook the importance of intrinsic motivation proposed by Deci (1975), Herzberg *et. al* (1957) and Hackman and Oldham (1976), whose basic assumption was that individuals were motivated by intrinsic processes when they perform certain behavior just because the behavior is 'motivating.' Actually, in Indonesia, there is an intrinsic reward serving as a motivating factor. It is called maintaining 'gengsi' (self-presentation). However, maintaining 'gengsi' leads to gaining more extrinsic economic rewards, as one needs a lot of cash to be able to maintain 'self-presentation.' Based on Kelly's (1955) concept of personal construct psychology, the two basic influences in Indonesian business setting can be seen as: the beliefs and expectations of the people and the social and cultural condition they have created. These two basic influences can be internal attributions arising from an individual's internal values and personality ranks, and/ or external attributions arising from a response to situational forces, such as expectations or validation. Internal attributions within



Indonesian employees include the innate '*gengsi*' (self-presentation) behavior adopted by Indonesians. External attributions include expectation for validation by the big group or the elders, and the need to keep the elders pleased.

Indonesians are motivated by both internal and external attributions to varying degrees. They are status and power oriented with a strong need for external or social affirmation. Economic rewards are considered to be able to bring higher status and power. Therefore, I concluded, in an Indonesian business setting, particularly in Jakarta, that extrinsic economic reward is the most motivating factor for employees.

Moreover, the respondents also regarded the importance of *peers (support from co-workers)* as a motivating factor. This is consistent with Hofstede's measurement of *individualism (IDV)*. Indonesia has one of the lowest world rankings for *individualism* with a rank of 14 of 100, compared to the greater Asian rank of 23 of 100, and world rank of 43 of 100. The score on this dimension indicates that Indonesian society is collectivist as compared to individualist. This is manifested in a close long-term commitment to the "group". The "group" could be a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and over-rides most other societal rules and regulations. The society fosters strong relationships where everyone takes responsibility for fellow members of their group. This condition might cause dependency among the people. Therefore, my respondents regarded supportive co-workers as the second most motivating factor, just a bit less important than economic rewards.

*Recognition* was considered less motivating than economic rewards and support from co-workers. In a collectivist society, recognition (from the society or the group) actually plays an important role in human relations. Acceptance from the whole group is extremely important, more important than mastery in the task. An example is how Muslim extremists are sometimes able to influence innocent Indonesians to perform terror attacks. They work through prominent groups in the society, and impose their destructive goals on the people. The 'reward' is being accepted in the group. However, in the focus groups and interviews, the respondents hinted that economic rewards were more important than mere recognition from the top management. They assumed, once they got the economic rewards, recognition (from the society) automatically came along.

*Competition* was not regarded as important as the other factors in the motivational process. In a collectivist society where the power distance is so high, seniority is regarded highly so that competition takes place below the surface. This might also explain why it is inappropriate to express the importance of competition; in a collectivist society, individual competition is not likely to be approved of. I would not say that there was no competition among the Indonesians. In fact, competition is in the air. We can feel it, but no one would admit that he was competing with his co-workers, nor consider competition as a motivating factor. This condition is very different from the condition in the western countries. The high *individualism* ranking for these western countries allows them to express competition more openly.



I am very much aware that Hofstede's (2001) cultural dimensions were not without flaws. Firstly, his study only involved IBM employees. Secondly, the data used was collected in the 1970s and may no longer be valid in some countries. Thirdly, the homogeneity of a country is likely to vanish when the country has very large population, or is ethnically diverse, promoting distinct groups and cultural heterogeneity. However, Hofstede's findings are widely used in part because they have been measured in so many different countries; and there is no other comprehensive measure of culture for which national norms have been established so widely. Therefore, despite those flaws, I still use Hofstede's cultural dimensions in explaining many "unexpected" findings I found in my study.

### **Motivational Styles**

In general, the respondents adopted an important aspect of a mastery orientation motivational style. Mastery orientation motivational style is based on internal attribution, assuming that individuals set themselves internal standards that become the basis for the ideal self. When an individual is primarily inner-directed, positive motivation is part of his or her self-concept. The individual tends to use fixed standards of self measurement as he attempts to reinforce perceptions of competency, and achieve higher levels of competency. This need to achieve higher levels of competency is similar to what McClelland (1961) referred to as a high need for achievement or mastery orientation. For these individuals, their efforts are vital in achieving outcomes and their ideas and

actions are instrumental in performing a job well. This process is similar to Deci's (1975) idea of intrinsic motivation as representing one's attempt to seek out and overcome challenges, and Katz and Kahn's (1978) idea of internalized motivation as self-expression derived from role performance. In Indonesia, the internal self-concept-based motivation is not strong, as Indonesia is a collectivist society, seeking external validation of self concept. People attempt to meet the expectations of others by behaving in ways that will elicit social feedback consistent with self perceptions. When positive task feedback is obtained, the individual finds it necessary to communicate these results to members of the reference group. The individual behaves in ways which satisfy reference group members, first to gain acceptance, and after achieving that, to gain status. These two needs, for acceptance and status, are similar to McClelland's (1961) need for affiliation and need for power, and Dweck's (1996) interpersonal goals striving for validation. This type of motivation is also similar to Etzioni's (1975) social moral involvement. This case is more likely to be found in Indonesia, where people seek recognition or approval. Motivating people through external validation is unstable yet promising. When people are more externally motivated, we may engineer the environment to motivate them optimally.

### ***7.2.2 Impact of the implementation of the balanced scorecard on employees' motivation***

In reality, fundamental motivational styles do not change easily. Despite ideas about increasing people's motivation, it is easier to create a new situation than to reinvent the people. This study is based on the premise that manipulating the



environment is controllable, while changing people is not so easily achieved. The best thing we can do to change the people's motivational styles would be manipulating the environment, as in this study, implementing the balanced scorecard.

The balanced scorecard is based on the assumption that behavior is motivated by goal internalization when the individual adopts attitudes and behaviors because their content is congruent with their value system. Katz and Kahn (1978) described this type of motivation as internalized values, and Etzioni (1975) suggested a similar concept called pure moral involvement. Becker (1992) and O'Reilly & Chatman (1986) have examined goal internalization as one dimension of organizational commitment. Latham and Locke (1979) described goal-setting as an effective motivational technique, for it emphasizes the role of intentions or deliberate determinations to act, as major causes of motivated behaviour. If a person makes a commitment to an objective, such a goal will in fact strongly influence the subsequent behaviour of that person. The goals that seem to have the greatest positive effects on performance are those that are both specific and challenging. According to its founders, the balanced scorecard provides an ideal framework for goal-setting for employees, because it is derived from the firm's strategies (Kaplan, 2000). It also fits the collective Indonesian society, where the goal of being part of a bigger group is so prominent. The nature of the goals of the balanced scorecard are performance and interpersonal, striving for validation. The implementation of the balanced scorecard might cause the respondents to hold relationship and learning goals as well, seeking to

improve people's relationship skills. Factors such as *vision repeated*, *self confidence*, *part of a big project*, and *enhanced feedback* were stated to motivate people. Even though the results of the questionnaires regarding respondents' perceptions on the balanced scorecard were not drastically different from each other, "being part of the big project" was considered the most motivating factor in the balanced scorecard. My respondents on average valued the implementation of the balanced scorecard quite highly.

Kaplan and Norton (2004) listed a number of companies using the balanced scorecard with notable success: Deb Beck, executive vice president of planning and technology of Northwestern Mutual stated that the balanced scorecard helped them in *vision repeated* and made the employees feel *a part of the company* by enabling them to visualize their roles in furthering the company's strategic objectives. A survey conducted at Volvofinan showed that the balanced scorecard gave the employees a stronger grasp of strategy and more *self confidence* as shown in their improved mastery of industry dynamics. J. Stewart Bryan III, chairman and CEO of Media General, Inc. found that BSC provided an environment with *less competition* and more cooperation. Through the *feedback control* system embedded in the BSC, it also helped the company to gain a much deeper understanding of its customers' needs. The company's performance also increased with the help of the BSC implementation. In the public sector, the U.S. Department of Commerce Economic Development Administration (EDA) gained a visible reward for implementing the balanced scorecard. It has been singled out by the White House's Office of Management and Budget as an efficient and



effective government agency meeting or exceeding its targets. As a result, the White House rewarded EDA by granting an increased funding request for fiscal year 2004. Fulton County School System measured the success of BSC implementation by the improved percentage of pass rates of the students. For the Boston Lyric Opera, the BSC had become a management tool for setting priorities among initiatives, *motivating* employees, aligning the board, and soliciting external support for its production. All of the above examples represent the success of BSC implementation in western countries. In addition, the traits embedded in the BSC were evaluated by general respondents not distinguished by motivational styles. My study was done in Indonesia, where the environment is quite different than in the western countries.

In the questionnaires, the respondents agreed that the balanced scorecard was a motivating factor. They seemed to appreciate the balanced scorecard as a helpful motivating factor, as they rated “important” motivating factors in the pre-implementation questionnaires as “fulfilled” by the implementation of the balanced scorecard. However, there was no significant shift of motivational styles and perception of motivating factors in the post-implementation questionnaires. The adoption of mastery orientation did not change much. The implementation of BSC seemed even to decrease slightly the number of people adopting a mastery oriented motivational style. Before the implementation, 47 respondents strongly adopted an important aspect of a mastery oriented motivational style. After the implementation of the balanced scorecard, 45 respondents still adopted a mastery oriented motivational style. In the T-test

described in chapter 5 (section 5.1), I found that based on the questionnaires results, there was no significant change in motivational styles, preferences towards motivating working condition, and motivating factors before and after the implementation of the balanced scorecard.

In the interviews and focus groups, the respondents were enthusiastic about the implementation of the balanced scorecard. On average, they considered the implementation of the balanced scorecard quite motivating. They expected the balanced scorecard to impose positive working conditions and motivating factors. However, from the T-test (chapter 5, section 5.2 and 5.3), based on the interviews and focus groups results, it was revealed that there was no significant change in the respondents' motivational styles, their preferences towards motivating working environment and motivating factors, before and after the BSC implementation. Therefore on the basis of the above facts, I may conclude that in Indonesia, the causality claimed to hold between the implementation of balanced scorecard and motivation claimed by Kaplan and Norton is problematic. Kaplan and Norton (1996) are theoretically unclear about their claim regarding how the balanced scorecard motivates the users to excel. They may be mistaking a distinction between a reasonable and a causal relationship. There might be a reasonable relationship between the implementation of the balanced scorecard and a favorable shifting of motivational styles. The balanced scorecard is designed based on the vision and missions of the organization. The users of the balanced scorecard are continuously aware of the organization's vision and mission, and of their own personal goals. Reasonably, they should be motivated



to excel and adopt a mastery oriented motivational style. People with maladaptive motivational styles might also gain from the balanced scorecard as it can be seen as containing attribution re-training, which is known as a technique to enhance motivation. Consequently, a relationship between the implementation of the balanced scorecard and shifts from maladaptive to mastery oriented motivational style could be explained reasonably. Yet, to claim that there is a causal relationship between these variables would need more evidence from more unambiguous experimental data. Moreover, Kaplan and Norton (1996) based the balanced scorecard model on empiricism and assumptions. They refer to case studies they had carried out, which are highly complex. The complexity is an indication that there could be a gap between the empirical world and the theory developed in the balanced scorecard. In fact, the significance of the gap may in part be the result of insufficient attention being paid to how to translate the empirical world of case studies into theory. Finally, the balanced scorecard was founded by two Americans, and therefore it might be inappropriate in a collectivist society such as Indonesia.

A noteworthy point emerged in the interviews. Even though in the pilot project the balanced scorecard was not yet tied to economic rewards, the respondents seemed to believe strongly that in the future implementation of BSC, economic rewards should be tied to the evaluation based on the balanced scorecard. (Subsequently, starting from 2005, the balance scorecard has been tied directly to economic rewards). This is in accordance with Lorsch's (1987) view, that an effective reward system should be designed to fit with the other design features

of the organization as well as with its business strategy. The IMT balanced scorecard was designed to entrench a proper economic reward system within the company. Confirmed by the questionnaires results, the economic reward was the most motivating factor, and therefore when a tool (balanced scorecard) was tied to economic rewards, this tool would be considered as highly motivating. Other balanced scorecard attributes that were considered motivating were as follows. Firstly, the balanced scorecard repeatedly reminded the users about the vision and mission of the firm. Whenever they looked at the balanced scorecard form, they were reminded of the organization as an entity, the organizational vision, and their personal goals. They were aware of how their personal goals might contribute to the organization as a whole. As Latham and Locke (1979) described, goal-setting is an effective motivational technique, for it emphasizes the role of intentions or deliberate determinations to act, as major causes of motivated behavior. If a person makes a commitment to an objective, such a goal will in fact strongly influence the subsequent behavior of that person. Secondly, they believe that the balanced scorecard boosted their self confidence by providing comprehensible objectives so that they had clearer guidance in doing their every day jobs without being afraid of unnecessary mistakes. Thirdly, they felt the balanced scorecard bestowed a sense of belonging by clearly defining the ultimate goals of the big project (the firm) and how all small projects (the respondents' personal goals) were related to the success of the big project. Fourthly, since the balanced scorecard provided a feedback mechanism by evaluating performance periodically, this might help to keep them on track and in alliance with the organization's vision and missions.



### **Balanced Scorecard with EVA Measurement as a Motivating Factor**

Reward was considered the most motivating factor by the respondents, and they believed the balanced scorecard was able to provide proper reward mechanism. The balanced scorecard was a tool which systematically expands the measurement areas traditionally involved in accounting. It might contribute to sharpening communication in the company in that it was not restricted to financial measures but also included non-financial ones, which provided a more comprehensive picture of the company. The ultimate goal of the balanced scorecard was how to maximize IMT's *economic value added* through the personal goals of the employees. In IMT, while each employee had his own personal balanced scorecard, all had access to the big picture, the firm's balanced scorecard. With this knowledge, every one felt a part of the big plan, maximizing the company's EVA. As part of the big plan, each got his own reward based on his personal performance. Therefore, the balanced scorecard was considered as a reasonable source of rewards, both intrinsic and extrinsic. When a person excelled in the score, he should be able to receive both recognition (intrinsic) and extrinsic rewards. He would feel an important part of the firm, for he had contributed to the maximization of the economic value added, and he would gain more self-confidence in addition to an extra cash bonus. According to Newman (1987) and Wallace *et al.* (1991), a focus on reward, especially extrinsic ones, might drive "impulsive" behavior. In the motivating process, "impulsive" behavior is not necessarily negative. In fact, it might lead to mastery orientation. In this study, extrinsic rewards were valued the most by the respondents, and the

balanced scorecard provided this reward mechanism. Consequently, it might be regarded as a tool in motivating the employees.

### **Was the Implementation of Balanced Scorecard Worth the Effort?**

Looking at the results on motivational styles, and also the stability of the respondents' perception of motivating factors, it can be concluded that even though the implementation of the balanced scorecard did not change their motivational styles, they regarded it as motivating, based on their perception of motivating factors. Therefore, when it was presumed at IMT that the incremental theory holds, it was worth the effort to implement the balanced scorecard; Dweck (1995) distinguishes two theories that predict inferential practices in person perception, the entity theory and the incremental theory. Entity theory assumes that an individual's personal attributes are fixed entities that cannot be changed. In contrast, incremental theory holds that the qualities of a person are not fixed but malleable. Holding to the incremental theory, the efforts of top management in manipulating the environment (in this case, implementing the balanced scorecard) in order to motivate the employees might be fruitful, and therefore, despite setbacks, it may still be worth implementing the balanced scorecard in an attempt to motivate employees.



### ***7.2.3 Association between motivation, level of cognitive ability, and performance in the Indonesian cultural context***

Adoption of a motivational style has no clear association with the level of aptitude and performance. The findings show that people who claimed to have an important aspect of a mastery oriented motivational style do not necessarily possess a higher level of aptitude nor perform better than people adopting maladaptive motivational styles. In chapter 6 (section 6.1) the chi-square test confirmed that there was no evidence of a significant association between motivation and level of cognitive ability. Chapter 6 (section 6.2) showed that there was no strong correlation between performance and cognitive ability. The chi-square test in section 6.3 confirmed that BSC performance appeared to be independent of respondents' cognitive ability. These findings challenged Facione's *et.al* (1997) statement that the overall disposition toward critical thinking was the consistent internal motivation to employ one's critical thinking abilities in judging what to believe or to do in any situation. Facione *et.al* (1997) believed that if one was inclined or disposed toward thoughtful and intellectually honest problem-solving, and if one was also skilled and knowledgeable, there was a much greater chance that one would be consistently successful. However, they did not specify what kind of internal motivation and what kind of intelligence lead to success. In the case of an Indonesian business setting, Indonesians tend to link position and status to reward rather than increased efforts. In Indonesia, status determines pay. Therefore, generally Indonesians are more motivated to pursue both hedonistic and concrete goals. Hedonic goals focus on pleasure and pain whilst concrete goals focus on concrete rewards and

punishments (Dweck, 1996). Both focus on rewards, no matter what kinds of motivational styles they adopt nor how high the level of cognitive ability they possess. In my study, all the respondents achieved good performance, regardless of their motivational styles and their level of cognitive ability. This shows that they were motivated to achieve good performance by other drivers not investigated in my study. On the negative side, there are quite a number of studies with examples of 'impulsive' behaviour driven by a focus on rewards that might explain the corruption in Indonesian society (Newman, 1987; Wallace *et al.*, 1991). Therefore, it can be concluded that adoption of a motivational style has no systematic association with the level of aptitude and performance in this study.

### 7.3 Business and Educational Implications of the Study

The findings above might help business researchers and thinkers to re-design their approaches to motivation. Some of the findings confirmed the findings of previous research. An important finding of this study is the fact that there is no association between motivational styles adopted and the level of aptitude of an individual. Neither is there any clear relationship between motivational styles and performance. This finding might only be found in Indonesia and / or greater Asia where the culture of collectivism exists. These facts might help firms ease the standards for employee recruitment. Not all recruits need to demonstrate a mastery orientation motivational style. Other people adopting maladaptive motivational style might perform well, too, or even better than those adopting mastery orientation.



Another important finding would be how the balanced scorecard might motivate members in an Indonesian business setting by embedding economic rewards within it. For business firms, particularly in Indonesia, the findings of the study might help to design and implement a balanced scorecard for optimal employee motivation. Presuming schools to be learning organizations, this study might also help them to motivate teaching and administrating staffs with the help of the balanced scorecard.

The most important motivating factor would be the existence of rewards embedded in the balanced scorecard. Therefore, when designing an incentive scheme, firms might want to embed intrinsic and extrinsic rewards to motivate the people more effectively. In schools, the school management might design a motivation scheme by entrenching rewards as well (though the practical and ethical problems are formidable). As Lorsch (1987) argued, an effective reward system should be designed to fit well with the other design features of the organization as well as with its business strategy. Decisions about the reward system should be made in an interactive fashion: shaped by the business strategy, tentative reward-system design choices would then be tested against how other features of the organization are being designed. This is why the implementation of the balanced scorecard with a reward system embedded in it is worth the effort, as its design is based on the firm's strategies.

## **7.4 Limitations of the Study**

### **Research Method**

The study was conducted from October 2002 to July 2005. It aimed to seek motivating factors in an Indonesian business setting, the association between motivational styles, level of cognitive and performance, and how the balanced scorecard might motivate employees. It was conceived as a controlled situation, with the implementation of the balanced scorecard, assuming everything else is held constant. However, since it was carried out in a dynamic environment, some things changed. Of the original 97 respondents, only 85 remained at the end of the study. Moreover, this study was conducted with only one group of respondents, there was no control group.

### **Imperfection of tools**

As for the choice of tools, I was intrigued to use the balanced scorecard due to its uniqueness and instant popularity. The balanced scorecard is a relatively new tool invented by Kaplan and Norton (1992). It has been claimed as a great success within the business world. As founders of the balanced scorecard, Kaplan and Norton claimed that the use of this card was able to motivate people in the organization to perform in alliance with the organization's goals. Therefore, I thought it would be constructive to use the balanced scorecard in conducting my study. However, I found some imperfections in this tool. Kaplan and Norton (1996) based the balanced scorecard model on empiricism and apparently logical assumptions. They refer to case studies they had carried out, which are highly



complex. The complexity would be an indication that there is a gap between the empirical world and the theory developed in the balanced scorecard. In fact, the significance of the gap may in part be the result of insufficient attention being paid to how to translate the empirical world of case studies into theory.

In assessing the motivational styles, I used the questionnaires, interviews, and focus group discussions. The questionnaire technique bears some flaws. It was subjective for it was based on the respondents' reporting of their own perceptions of what would apply to them. Moreover, in the questionnaires, some answers did not produce any useful data. In other words, respondents who answered "depends" to the four questions could not be categorized into any motivational styles, because it was not clear what mindset they were adopting regarding their preferences. Moreover, in categorizing my respondents into mastery orientation, I used "effort" as an aspect of mastery orientation (Question 3 in the questionnaires). Mastery oriented people respond to failure by seeking evidence that will help them to overcome their problems, and as a result of their constructive problem solving response, they increase their effort. While it is true that effort is an important aspect of mastery orientation, in reality mastery orientation is not confined to effort. It is a mindset developed in people's mind, directing constructive responses to failure. People focusing much on effort are not necessarily adopting a mastery oriented motivational style. However, people adopting a mastery oriented style are more likely to increase their efforts in response to failure.

## **7.5 Conclusion**

The study of motivational styles is dynamic. It is not easy to decipher people's motivational styles. It is even harder to find ways and techniques to motivate people. While acknowledging flaws and limitations, I would claim that the implementation of the balanced scorecard aiming to motivate people may still be worth the attempt, especially if extrinsic economic rewards are embedded in it. Organizational culture and the traditions, ethnicity and background of the people contribute to their motivation. The results of this study could not only contribute to the prevalent understanding about motivational styles in the Indonesian business context, but also assist the management of Indomobil group in implementing the balanced scorecard.

## **7.6 Recommendation for further study**

This study might contribute to the assessment of motivation as an individual learning process as well as to organizational learning. Due to the uniqueness of IMT as the object of the study, the results might not be applicable universally. However, in general, this study might be seen as a useful resource in planning further studies of balanced scorecard as a motivational tool. Additional studies need to be conducted to demonstrate a causal relationship between the balanced scorecard and motivational styles. Also an experimental study with a control group would be likely to increase validity.



## 7.7 Reflection on the research

I chose to study motivation in an Indonesian business setting and its association with the balanced scorecard implementation because both subjects appealed to me as significant for survival in this ever-changing competitive world. Human motivation provides a key to reaction to circumstances, and researchers and psychologists are still debating this subject. This study is a journey, not a destination. I found the dynamic discussion on motivation an interesting topic to study.

In early 2002, as a business consultant, I was asked to implement the balanced scorecard as a pilot project in one of Indomobil Group's subsidiary firms, IMT. When the top management considered this as a pilot project, I proposed a longitudinal study on how motivational styles might be changed in a learning organization, IMT. They welcomed the proposal, as it was their desire as well to be able to evaluate the sales force's motivational styles, and how they might affect the sales performance. The study was conducted smoothly. All questionnaires were returned, and I was able to conduct all the interviews and focus groups without much risk of losing track of my respondents. A few of my respondents resigned from the company during my study. However, those respondents were a low percentage of the total and did not compromise the results.

One of the constraints encountered would be the attitude of the respondents in responding to the questionnaires. I told my respondents to answer all the

questions honestly, as there were no right or wrong answers. However, some of them may have tended to 'please' me by choosing the answers that they thought I would most likely expect. They may have been trying to 'impress' me by showing that they were adopting a mastery oriented motivational style. It is not clear whether they were doing this because I am the wife of their boss, or because they were just simply showing the 'best' side of themselves.

This study took longer than I expected. It began in early October 2002, and ended in July 2005. When I finished this study, I had gained additional understanding of the dynamic of learning organizations and how to motivate people within it. I think this insight will be useful for my future position in managing people within my organization.



## References

- AimÉ, A., Sabourin, S., Valois, P. (2000) L'appariement des Styles de Motivation et l'évolution de la Satisfaction Conjugale, *Canadian Journal of Behavioural Science*, 32 (3), p. 178 – 186.
- Ames, C., Ames, R. (Eds) (1989) *Research on Motivation in Education, 3: Goals and Cognitions*, London: Academic Press
- Ames, C., Archer, J. (1988) Achievement Goals in the Classroom: Students' Learning Strategies and Motivation Processes, *Journal of Educational Psychology*, 80, p. 260–267.
- Atkinson, J.W. (1964) *An Introduction to Motivation*, Princeton, NJ: Van Nostrand
- Atkinson, J., McClelland (1958) *Motives in Fantasy, Action, and Society*, Princeton NJ: D. Van Nostrand.
- Balanced Scorecard Collaboration (2000) Strategy Focused Organization, [www.bscoll.org](http://www.bscoll.org), accessed in February 2004.
- Barnard, C. (1938) *The Functions of the Executive*, Cambridge, MA: Harvard University Press.
- Becker, T.E. (1992) Foci and Bases of Commitment: Are They Distinctions Worth Making? *Academy of Management Journal*, 35, p. 232-244.
- Becker, B. E., Huselid, M. A., and Ulrich, D. (2002) *The HR Scorecard: Linking People, Strategy, and Performance*, Harvard Business School Press
- Berkman, E (2002) How to Use the Balanced Scorecard, *CIO*; Framingham
- Biro Pusat Statistik (2005) <http://www.bps.go.id/>, accessed in January 2006
- Campbell, J.P., Pritchard, R.D (1976) Motivation Theory in Industrial and Organizational Psychology, in M.D. Dunnette (Ed), *Handbook of Industrial and Organizational Psychology*, Chicago: Rand McNally
- Cantor, N., Norem, J. K., Langston, C. A., Zirkel, S., Fleeson, W., Cook-Flanagan, C. (1991) Life tasks and daily life experience. *Journal of Personality*, 59, p. 425–451.
- Chan, Christopher C. A. (2003) Examining the Relationships between Individual, Team and Organizational Learning in an Australian Hospital, *Learning in Health and Social Care* 2 (4), p. 223

Cook, T.D., Campbell, D.T. (1979) *Quasi-experimentation: Design and analysis issues for field settings*, Boston: Houghton-Mifflin

Covington, M.V.(1998) *The Will To Learn: A Guide for Motivating Young People*, Cambridge: Cambridge University Press

Craske, M.L. (1988) Learned Helplessness, Self-worth Motivation and Attribution Retraining for Primary School Children, *British Journal of Educational Psychology*, 58, p. 152-164

Damasio, A. R. (1994) *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: Putnam.

Davis, T.R.V. (1996) Developing an Employee Balanced Scorecard: Linking Frontline Performance to Corporate Objectives, *Management Decision*, 34 (4), p. 14 – 18

deCharms, R. (1968) *Personal Causation: The Internal Affective Determinants of Behavior*. New York: Academic Press.

Deci, E.L. (1975) *Intrinsic Motivation*. New York: Plenum.

Deci, E. L., Ryan, R. M. (1985) *Intrinsic Motivation and Self-Determination in Human Behavior*, New York: Plenum.

Diener, C. I., Dweck, C. S. (1978). An Analysis of Learned Helplessness: Continuous Changes in Performance, Strategy, and Achievement Cognitions Following Failure. *Journal of Personality and Social Psychology*, 36, p. 451–462.

Dodge, K. A., Asher, S. R., Parkhurst, J. T. (1989) Social Life as a Goal Coordination Task, In C. Ames, R. Ames (Eds.), *Research on Motivation in Education, Vol. 3*. New York: Academic Press.

Donaldson, G., (1984) *Managing Corporate Wealth*, NY, Praeger.

Dweck, C.S. (1986) Motivational Processes Affecting Learning, *American Psychologist*, 41, p. 1040 - 1048

Dweck, C.S. (1996) Capturing the Dynamic Nature of Personality, *Journal of Research in Personality*, 30, p. 348 -362

Dweck, C.S. (2001) *Self-Theories: Their Role in Motivation, Personality and Development*, Philadelphia, Pa.: Psychology Press

Dweck, C. S., Chiu, C., Hong, Y. (1995) Implicit Theories and Their Role in Judgments And Reactions: A World From Two Perspectives, *Psychological Inquiry*, 6, p. 267–285.



- Dweck, C. S., Elliott, E. S. (1983) Achievement Motivation, In P. Mussen, E. M. Hetherington (Ed.), *Handbook of Child Psychology*. New York: Wiley.
- Dweck, C. S., Hong, Y., Chiu, C. (1993) Implicit Theories: Individual Differences in the Likelihood and Meaning of Dispositional Inference, *Personality and Social Psychology Bulletin*, 19, p. 644–656.
- Dweck, C. S., Leggett, E. L. (1988) A Social-Cognitive Approach to Motivation and Personality, *Psychological Review*, 95, p. 256–273.
- Elliott, E. S., Dweck, C. S. (1988) Goals: An Approach to Motivation and Achievement. *Journal of Personality and Social Psychology*, 54, p. 5–12.
- Elliot, J., Hufton, N.R., Willis, W., and Illushin, I. (2005) *Motivation, Engagement and Educational Performance*, London: Palgrave Press
- Emmons, R. A., King, L. A. (1988) Conflict Among Personal Strivings: Immediate and Long-Term Implications for Psychological and Physical Well-Being, *Journal of Personality and Social Psychology*, 54, p. 1040–1048.
- Emmons, R. A. (1989) The Personal Striving Approach to Personality. In L. A. Pervin (Ed.), *Goal Concepts in Personality and Social Psychology*, p. 87–126. Hillsdale NJ: Erlbaum.
- Erdley, C. A., Dweck, C. S. (1993) Children's Implicit Personality Theories as Predictors of Their Social Judgment, *Child Development*, 64, p. 863–878.
- Etzioni, A. (1975) *Comparative Analysis of Complex Organizations*. New York: MacMillan Publishing Co.
- European Consortium for the Learning Organization ECLO (2004) Introduction to ECLO, [www.eclo.org](http://www.eclo.org), accessed in November 2004.
- Facione, PA, Facione, NC, Giancarlo, CA, (1997) The Motivation to Think in Working and Learning, in Jones, E (Ed.) *Preparing Competent College Graduates: Setting New and Higher Expectations for Student Learning*. San Francisco, CA: Jossey-Bass Publishers. p. 67-79.
- Farber, B. (1991) *Crisis in Education*, San Fransisco, CA, Jossey-Bass
- Fatemi, A., Desai, A., and Katz, J. P., (2003), *Wealth Creation and Managerial Pay: MVA and EVA as Determinants of Executive Compensation*, Online white paper
- Festinger, L. (1957) *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.

- Follesdal, D., Walle, L. and Elster, J., (1997) *Argumentasjonsteori, Sprak Og Vitenskapsfilosofi*, Oslo, Universitetsforlaget.
- Ford, M. E. (1992) *Motivating Humans: Goals, Emotions, and Personal Agency Beliefs*, Newbury Park CA: Sage.
- Freud, S. (1915) The Unconscious, in *Collected Papers of Sigmund Freud*, Vol. IV, London: Hogarth
- Fullan, M. G. (1993) *Change Forces: Probing the Depths of Educational Reform*, London: Falmer Press
- Galloway, D., and Leo, E.L. (1996) Maladaptive Motivational Style: The Role of Domain Specific Task Demand in English and Mathematics, *British Journal of Educational Psychology*, 66, p. 197-207
- Galloway, D., Rogers, C., Armstrong, D., and Leo, E. (1998) *Motivating the Difficult to Teach*, London: Longman
- Gardner, H. (1991) *The Unschooled Mind*, New York, Basic Book
- Graduate Management Admission Council (2002), *Reliability and Validity of GMAT Scores*,  
<http://www.gmac.com/gmac/TheGMAT/GMATScores/ReliabilityandValidityofGMATScores.htm>, accessed in November 2006
- Grant, H. and Dweck, C.S. (2003) Clarifying Achievement Goals and Their Impact, *Journal of Personality and Social Psychology*, 85 (3), p. 541-553
- Hackman, J.R., Oldham, G.R. (1976) Motivation Through the Design of Work: Test of a Theory. *Organizational Behavior and Human Performance*, 16, p. 250-279.
- Harter, S., Jackson, B. J. (1992) Trait Vs. Nontrait Conceptions of Intrinsic/Extrinsic Motivational Orientation, *Motivation and Emotion*, 16, p. 209–230.
- Harvey, J. (1989) *The Abilene Paradox*, San Diego, CA, University Associates
- Herzberg, F., Mausner, B., Peterson, R. O., and Capwell, D. F. (1957) *Job Attitudes: Review of Research and Opinion*, Pittsburgh: Psychological Services of Pittsburgh
- Hill, Frances M., Hazlett, Shirley-Ann, and Meegan, Sarah (2001) A Study of the Transition from ISO 9000 to TQM in the Context of Organisational Learning, *International Journal of Quality and Reliability Management*, 18 (2) p. 142 - 169
- Hofstede, Geert (2001) *Culture's Consequences, Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, Thousand Oaks CA: Sage Publications



Hong, Y., Chiu, C., Dweck, C.S., and Sacks, R., (1997) Implicit Theories and Evaluative Processes in Person Cognition, *Journal Of Experimental Social Psychology*, 33, p. 296–323

Hull, C.L. (1943) *Principles of Behaviour*, New York: Appleton Century Crofts

Hull, C.L (1952) *A Behaviour System: An Introduction to Behaviour Theory Concerning Individual Organism*, New Haven, Conn.: Yale University Press

Ittner, C.D., Larcker, D.F., and Meyer, M.W. (1997) *Performance, Compensation, and the Balance Scorecard*, Research conducted at the University of Pennsylvania: The Wharton School.

Ittner, C. D., Larcker, D. F. (1998). Innovations in Performance Measurement: Trends and Research Implications, *Journal of Management Accounting Research*, 10, p. 205-239.

James, C. R.(2003) Designing Learning Organization, *Organizational Dynamic*, 32 (1), p. 46-61.

Janssen, P.P.M., de Jonge, J. and Bakker, A.B. (1999) Specific Determinants of Intrinsic Work Motivation, Burnout and Turnover Intentions: A Study Among Nurses, *Journal of Advanced Nursing*, 29 (6), p. 1360

Johnson, D.W., and Johnson, R.T. (1985) Motivational Processes in Cooperative, Competitive, and Individualistic Learning Situations, In Ames, Ames, *Research on Motivation in Education: The Classroom Milieu*, London: Academic Press, p. 249 -286

Johnson, R.A., Bhattacharyya, G.K. (1996), *Statistics: Principle and Methods*, John Wiley and Sons, Inc.

Jones, M.R. (1955) *Nebraska Symposium on Motivation*, Lincoln: University of Nebraska Press

Kaming, P.F., Olomaiye, P.O., Holt, G.D., Harris, F.C. (1998) What Motivates Construction Craftsmen in Developing Countries? A Case Study of Indonesia, [www.sciencedirect.com](http://www.sciencedirect.com), accessed in February 2004

Kaplan, R. S., (2003) Improving Corporate Governance: A Balanced Scorecard Approach, *Harvard Business School Publishing Audio Conference*, October 27, 2003

Kaplan, R. S. and Cooper, R. (1998). *Cost and Effect-Using Integrated Cost Systems to Drive Profitability and Performance*, Boston, Harvard Business School Press.

- Kaplan, R. S., and Norton, D. P. (1992) *The Balanced Scorecard: Measures that Drive*, *Harvard Business Review*
- Kaplan, R. S., and Norton, D. P. (1996) *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press
- Kaplan, R. S., and Norton, D. P. (2000) *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment*, Harvard Business School Press
- Kaplan, R. S., and Norton, D. P. (2004) *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*, Harvard Business School Publishing Corporation
- Kaplan, R. S., and Norton, D. P. (2003) *Putting the Balanced Scorecard to Work*, e-book
- Kasser, T., Ryan, R. M. (1993) A Dark Side of the American Dream: Correlates of Financial Success as a Central Life Aspiration, *Journal of Personality and Social Psychology*, 65, p. 410–422.
- Kasurinen, T. (2000) Exploring Management Accounting Change: The Case of Balanced Scorecard Implementation, *Management Accounting Research*, 13 (3), p. 323-343
- Katz, D., Kahn, R.L. (1978) *The Social Psychology of Organizations*. New York: Wiley.
- Kelly, G. A. (1955) *The Psychology of Personal Constructs*. Volume 1: A Theory of Personality. Volume 2: Clinical Diagnosis and Psychotherapy. New York. Norton.
- Kelman, H. (1958). The Induction of Action and Attitude Change. In G. Nielson (Ed.), *Proceedings of the XIV International Congress of Applied Psychology*, p. 81-110.
- Kelner, S. P., Jr. (1991) *Interpersonal Motivation: Cynical, Positive, And Anxious.*, Unpublished doctoral dissertation, Boston University.
- Kelner, S. (2000) Human Motivation and Organizational Mobilization, *Center for Quality of Management Journal*, 9(1), p. 25-43
- Kerlinger, F. N (1986) *Foundation of Behavioral Research*, Holt, Rinehat and Winston, Inc., Fort Worth.
- Kinman, Gail and Kinman, Russell (2001) The Role of Motivation to Learn in Management Education, *The Journal of Workplace Learning*, 13(4), p. 132 – 144
- Koentjaraningrat (1981). *Pengantar Ilmu Antropologi [Introduction to Anthropology]*, Jakarta: Bhineka Cipta Sarana.



Latham, G. P. and Locke, E. A. (1979), Goal Setting – A Motivational Technique That Works, *American Management Association*, Autumn, 1979

LeClaire, J (2003), Competition Gears Up, *Christian Science Monitor*, July 21, 2003

Leo, E.L., and Galloway, D. (1996) Evaluating Research on Motivation: Generating More Heat Than Light? *Evaluation and Research in Education*, 10 (1), p. 35-47

Lewin, K. (1938) *The Conceptual Representation and the Measurement of Psychological Forces*, Durham, N.C.: Duke University Press

Lieberman, A., Darling-Hammond, L., and Zuckerman, D. (1991) *Early Lessons in Restructuring Schools*, New York, NY, National Center for Restructuring Education, Schools, and Teaching

Little, B. (2003) Building a Learning Organization, *E-Learning Age*, July-August 2003

Lockwood, P., Jordan, C.H., and Kunda, Z. (2002) Motivation by Positive or Negative Role Models: Regulatory Focus Determines Who Will Best Inspire Us, *Journal of Personality and Social Psychology*, 83 (4), p.854-864

Lorsch, J. W (1987) *Handbook of Organizational Behavior*, Englewood Cliffs, N.J.: Prentice Hall

McAdams, D. P. (1985) Motivation and Friendship. In S. Duck, D. Perlman (Eds.), *Understanding Personal Relationships: an Interdisciplinary Approach*, p. 85–105, London: Sage.

McClelland, D.C. (1955) Some Social Consequences of Achievement Motivation, In D. Levine (Ed.) *Nebraska Symposium on Motivation*, Vol. 3, Lincoln: University of Nebraska

McClelland, D.C. (1961) *The Achieving Society*. Princeton, NJ: Van Nostrand Reinhold.

McClelland, D.C., Koestner, R., and Weinberger, J. (1989) How Do Self-Attributed And Implicit Motives Differ? *Psychological Review* , 96 (4), p. 690–702.

McDougall, W. (1908) *An Introduction to Social Psychology*, London: Methuen

McLaughlin (1992) Employability Skills Profile: What Are Employers Looking For? *The Conference Board of Canada*, Ottawa, Canada

Movius, H.L., Allen, J.B. (2004) Cardiac Vagal Tone, Defensiveness, and Motivational Style, *Biological Psychology*, 68 (2), p. 147 - 162

Mueller, J. S., Amabile, T. M., Simpson, W. B., Fleming, L., and Hadley., C. N. (2000) The Influence of Time Pressure on Creative Thinking in Organizations, <http://www.hbs.edu/>, Harvard Business School, Division of Research, accessed in February 2004.

Newman, J. P. (1987) Reaction to Pain in Extraverts And Psychopaths: Implications for the Impulsive Behavior of Disinhibited Individuals. *Journal of Research in Personality*, 21, p. 464–480

Nicholls, J. (1984) Achievement Motivation: Conceptions of Ability, Subjective Experience, Task Choice, and Performance. *Psychological Review*, 91, p. 328–346

Nicholls, J.G. (1989) *The Competitive Ethos and Democratic Education*, Cambridge, Mass.: Harvard University Press

Niven, P (2002) *Balanced Scorecard Step-by-Step: Maximizing Performance and Maintaining Results*, John Wiley and Sons Ltd

Norreklit, H (2000) The Balance on the Balanced Scorecard: A Critical Analysis on Some of Its Assumptions, *Management Accounting Research*, 11, p. 65-88

O'Reilly, C., III, Chatman, J. (1986). Organizational Commitment and Psychological Attachment: the Effects of Compliance, Identification, and Internalization of Prosocial Behavior. *Journal of Applied Psychology*, 71, p. 492-499.

Olve, N. G., Roy, J. and Wetter, M., (1997) *Balanced Scorecard - I Svensk Praktik*, Sweden, Liber AB.

Ortenblad, A (2004) The Learning Organization: Towards an Integrated Model, *Learning Organization*, 11 (2)

Osteraker, M.C. (1999) Measuring Motivation in a Learning Organization, *The Journal of Workplace Learning*, 11 (2), p. 73-77

Peterson, D. R. (1989) Interpersonal Goal Conflict. In L. A. Pervin (Ed.), *Goal Concepts in Personality and Social Psychology* (p. 327–363). Hillsdale NJ: Erlbaum.

Pintrich, P.R., Marx, R.W., and Boyle, R.A. (1993) Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in the Process of Conceptual Change, *Review of Educational Research*, 63, p. 167-199

Pool S.W. (2000) The Learning Organization: Motivating Employees by Integrating TQM Philosophy in a Supportive Organizational Culture, *Leadership and Organization Development Journal*, 21 (8), p. 373-378



Price, James L (1997) Handbook of organizational measurement, *International Journal of Manpower*, 18 (4), p. 305 - 558

Read, S. J., Miller, L. C. (1989) *Social Goals and Social Relationships*. Paper presented at the meeting of the Society for Experimental Social Psychology, Santa Monica CA.

Sambrook, S., Stewart, J. (2000) Factors Influencing Learning in European Learning Oriented Organisations: Issues for Management, *Journal of European Industrial Training*, 24 (2), p. 209 - 219

Sanderson, C., Cantor, N. (1995) Social Dating Goals in Late Adolescence: Implications for Safer Sexual Activity. *Journal of Personality and Social Psychology*, 68, p. 1121–1134.

Sarwono, S.W. (1997). *Psikologi Sosial: Individu dan Teori-Teori Psikologi Sosial* [Social Psychology: Individuals and the Theories of Social Psychology]. Jakarta: Balai Pustaka.

Schaeffer, J., Weinfeld, M., Schwatlo, N.G., Kirle, B., Behrens, S.J., (1996) *GMAT Success*, Princeton, NJ.: Peterson's.

Schoenfeld, H. M. (1991). Companies Managerial Accounting and Control in Multinational Companies: State of the Art and Unresolved Issues, in Sørensen P. E. ed. *New Perspectives in Management Accounting*, Aarhus, The Aarhus School of Business, p. 57-106.

Schrage, M. (1990) *Shared Minds*, New York, Random House

Scott, W. E. (1966) Activation Theory and Task Design, *Organizational Behavior and Human Performance*, 1, p. 3-30

Sekaran, U (2000) *Research Methods for Business*, John Wiley and Sons, Inc., USA.

Seligman, M.P. (1975) *Learned Helplessness: On Depression, Development and Death*, San Francisco: Freeman

Senge, P. (1990) *The Fifth Discipline*, New York, Doubleday

Sim, K.L., Koh, H.C. (2001) Balanced Scorecard: A Rising Trend In Strategic Performance Measurement, *Journal of Measuring Business Excellence*, 5 (2), p. 18 – 27

Sizer, T. (1992) *Horace's School: Redesigning the American High School*, Boston, MA, Houghton Mifflin

- Smith, A.D., Rupp, W.T. (2003) An Examination of Emerging Strategy and Sales Performance: Motivation, Chaotic Change and Organizational Structure, *Marketing Intelligence and Planning*, 21 (3), p. 156 - 167
- Steers, R.M., Porter, L.W. (1991) *Motivation and Work Behavior*, New York: McGraw-Hill, Inc.
- Stephens, L.J. (1998) *Theory and Problems of Beginning Statistics*, New York: Mc.Graw-Hill
- Tolman, E.C. (1959) Principle of Purposive Behaviour, In S. Koch (Ed.) *Psychology: A Study of Science*, Vol. 2. New York: McGraw-Hill
- Turner A. N., and Lawrence, P. R. (1965) *Industrial Jobs and the Workers*. Boston: Harvard University, Graduate School of Business Administration
- University of Indonesia (2001) *Riset kwartal ke tiga*.
- United States Embassy (2004) <http://www.usembassyjakarta.org/econ/investment3.html>, accessed in April 2006.
- Van de Vliert E., Janssen O. (2002), 'Better Than' Performance Motives As Roots Of Satisfaction Across More And Less Developed Countries, *Journal of Cross Cultural Psychology*, July 2002, 33 (4), p. 380-397
- Veroff, J., Veroff, J. B. (1980) *Social Incentives: A Life-Span Developmental Approach*. New York: Academic Press
- Vroom, V.H. (1964) *Work and Motivation*, New York: Wiley.
- Wallace, J. F., Newman, J. P., Bachorowski, J. (1991) Failures of Response Modulation: Impulsive Behavior in Anxious and Impulsive Individuals. *Journal of Research in Personality*, 25, p. 23-44.
- Warren, R. (2002) *Purpose Driven Life*, Michigan: Zondervan
- Weiner, B. (1992) *Human Motivation: Metaphors, Theories and Research*, London: Sage
- Welch, J., Byrne, J.A. (2001) *Jack: Straight From The Gut*, New York: Warner Books
- Winter, D. (1971) *The Power Motive*, New York: Free Press
- Wiklund H. (2002) Widening the Six Sigma Concept: An Approach to Improve Organizational Learning, *Total Quality Management*, 13 (2), p. 233-239



Young, S. D., O'Byrne, S. F. (2001) *EVA and Value Based Management: A Practical Guide to Implementation*, New York: Mc.Graw-Hill

Appendix 1

Questionnaires before the implementation of BSC

You are to fill these questions below by marking on the area reflecting your answers.					
	5	4	3	2	1
	Strongly Agree	~Agree~	Depends	Disagree	Strongly Disagree
A When you fail to do some tasks, what is your excuse likely to be?	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
A1 You had bad luck					
A2 The task was too hard					
A3 You did not try hard enough					
A4 You are not clever enough					
B What conditions would you consider helpful in doing your everyday job?	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
B1 A tool that helps you to be aware of the company's vision that makes you try your best in doing your tasks					
B2 A condition that gives you more self confidence in doing your daily tasks					
B3 A condition that makes you feel a part of the big project, the company					
B4 An environment where you feel less competition between your colleagues					
B5 The management provides a new environment enhancing the feedback & control					
C What factors motivate you to excel	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
C1 A tool that helps you directing your aims					
C2 The top management's commitment to excellence					
C3 Positive corporate culture					
C4 Your co-workers' support					
C5 The reward promised by the top management					



Appendix 2

Questionnaires after the implementation of BSC

You are to fill these questions below by marking on the area reflecting your answers.					
	5	4	3	2	1
	Strongly Agree	~Agree~	Depends	Disagree	Strongly Disagree
A When you fail to do some tasks, what is your excuse likely to be?	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
A1 You had bad luck					
A2 The task was too hard					
A3 You did not try hard enough					
A4 You are not clever enough					
B How has the balanced scorecard Affected your motivation?	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
B1 The balanced scorecard helped you to be aware of the company's vision that makes you try your best in doing your tasks					
B2 The balanced scorecard gave you more self Confidence in doing your daily tasks					
B3 The balanced scorecard made you feel as a part of the big project, the company					
B4 By implementing the balanced scorecard, you felt less competition between your colleagues					
B5 The balanced scorecard provided a new Environment enhancing the feedback control					
C What factors motivate you to excel in the implementation of balanced scorecard ?	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
C1 The balanced scorecard itself					
C2 The top management's commitment to excellence					
C3 Positive corporate culture					
C4 Your co-workers' support					
C5 The reward promised by the top management					

## Set of Critical Reasoning Tests before BSC implementation

### Test A

1. The newspaper just reported that a man won this year's national baking contest for the first time in history. The contest has used both male and female judges for many years. This must have been the first year that the contest was open to male participants. Which of the following is an assumption upon which the speaker's conclusion is based?
  - a. The newspaper has never before reported the results of the national baking contest
  - b. Male judges are more likely to vote for a male contestant than a female contestant
  - c. Men have tried to enter the national baking contest for several years but have been denied
  - d. Men are generally superior than women and would be able to beat them in any kind of competition
  - e. Men are better bakers than women and could win this contest every year
2. *Advertisement:* Seven out of ten municipal employees choose Green Arrow Underwriters as their health insurance provider. From the information provided in this advertisement, what further conclusion may be drawn?
  - a. Green Arrow Underwriters has the cheapest premium rates of any other insurance company available
  - b. All other health insurance providers, excluding Green Arrow Underwriters, provide services to less than 50% of the municipal employees
  - c. Municipal employees need less health insurance coverage than employees in other industries
  - d. Green Arrow Underwriters provides more valuable services and better customer assistance than any of its competitors
  - e. Except for Green Arrow Underwriters, the health insurance industry is suffering a decline in the rate of obtaining new customers
3. In order to ensure a successful vote on the issue of abortion rights, the governor is pressuring the leaders of the state political party to replace several delegates to the national convention. The governor is insisting to include certain individuals with a history of voting in favor of abortion rights in the past. The governor's actions demonstrate that he is making which of the following assumptions?
  - a. Voting on abortion issues is an important part of the national political agenda
  - b. The current delegates will probably not share the governor's views on such issues as the national budget or federal spending limits
  - c. The proposed new delegates will continue to vote on abortion issues in the same way that they have voted in the past



- d. The national delegation will not have an opportunity to vote on any issues other than abortion rights
  - e. Governors of other states will be making similar changes to their states' delegations, so that the issue of abortion rights will be guaranteed to be decided as this governor desires
4. A poll of all voters in the state shows that only 11 percent of all people who voted were younger than 29 years old. These results prove that young Americans are not as interested in voting as are older generations. Which of the following statements, if true, would most seriously weaken the author's conclusion?
- a. The number of voters in the state under the age of 29 has increased for each of the past five years.
  - b. The average age of all voters in the state is 50 years old.
  - c. Of all people in the state who are old enough to vote, only 13 percent are younger than 29 years old.
  - d. Most of the voters in the state are Republicans, and the winning candidate is a Democrat.
  - e. The total number of voters this year was the lowest it has been in ten years.
5. Acme Company markets high-tech recording and videotaping materials for sale to parents of small children for the purpose of secretly recording the activities of their baby-sitters and nannies while they are away from home. In defending their products, an Acme representative argues, "More than 75% of the parents buying our surveillance equipment fire their baby-sitters or nannies within 2 weeks of their starting work. This proves that we have a nationwide problem with misconduct by all baby-sitters and nannies." Which of the following, if true, would most contradict the Acme representative's argument?
- a. Secretly recording or videotaping people without their consent is unconstitutional
  - b. The customers who use Acme Company's products are indicative of the nationwide population.
  - c. Of all the nannies who are fired in this country, more than 75% are illegal aliens.
  - d. Most of the people who use Acme Company's products suspected their baby-sitters of misconduct before using the equipment.
  - e. After six months of use, Acme Company's surveillance equipment tends to break down and become unreliable.

Questions 6 and 7 are based on the following:

Studies indicate that the job market for new graduates from law schools is as competitive as it has been in thirty years, and 40 % of new law school graduates in 2002 are expected to remain unemployed for the first year. As a result, law schools, anticipating smaller enrolments in the near future, are decreasing the size of their teaching staffs.



6. Which of the following presents a pattern of thinking that is most closely analogous to the preceding situation
- a. A college football coach limits the size of his recruiting staff because his team lost more of its games this year.
  - b. The mayor of a small town increases the budget for road maintenance because car sales in the past two years have increase by 40 %.
  - c. Meteorologists are predicting that next year will produce more hurricanes than any year in recent history, so hardware stores are stocking extra lumber supplies for boarding over windows.
  - d. A history teacher plans to assign extra homework every night this week because the students have to prepare for their final exams soon.
  - e. A bookstore manager returns 1000 copies of a book to its publisher because the book remained on the shelves for weeks without selling as predicted.
7. Which of the following statements, if true, would most strengthen the conclusion made by the law schools that enrolments will be decreasing?
- a. The accuracy of methods for predicting graduate school enrolments has been a subject of study for many years.
  - b. Nationwide enrolments in medical schools have decreased by 25% over the past two years.
  - c. Predictions regarding future enrolments in professional graduate schools are based on factors including unemployment rates for those professions
  - d. The last time that the unemployment rate among lawyers was as low as it is now, the nation had half as many lawyers as it does today.
  - e. Measuring unemployment levels in any profession historically has been an accurate method for predicting future graduate school enrolment.
8. Professional athletes today are more concerned with making high salaries than athletes in the past. Because athletes are willing to play wherever they can earn the most money, local fan loyalties have been decreasing and ticket sales to local sporting events have declined. Which of the following presents the best evidence to contradict the preceding argument?
- a. A professional figure skater who turns down a multimillion-dollar contract to endorse a product because she doesn't believe in the integrity of the advertising
  - b. A professional tennis player who agrees to play without compensation in a tournament to benefit cancer research
  - c. A professional football player who turns down more lucrative offers from several teams around the country in order to stay in his hometown
  - d. A professional hockey player from Canada who decides to play in New York because he will receive more public exposure
  - e. A professional baseball player who negotiates with the management of his team for the highest salary in the league



9. Real estate developer: "We expect that the formation of this new corporation to create a business park will make access easier for commuters to new businesses that we hope will locate in this area. As a result, tax revenues will increase and the quality of life in this area will improve." Which of the following, if true, would most weaken the developer's conclusion?
- a. The town's crime rate has steadily increased for each of the past three years.
  - b. The tax rate for new businesses in this area is higher than any other community in the state
  - c. High unemployment rates have never been a problem in this town
  - d. People who invest in the new corporation for town development will be motivated by their desire for a positive return on their investments and not by concern for the quality of life in this area
  - e. If new businesses open in this area, new money will be available to improve educational materials for local schools.
10. In a game of Monopoly, if a player owns a hotel on Boardwalk, he must own both Boardwalk and Park Place. If he owns a hotel in Marvin Gardens, he must own Marvin Gardens and either Boardwalk or Park Place. If he owns Park Place, he also owns Marvin Gardens. If the player described above does not own Park Place, which of the following conclusions may be drawn?
- a. The player owns a hotel on Boardwalk
  - b. The player owns a hotel in Marvin Gardens but does not own a hotel on Boardwalk
  - c. The player owns Marvin Gardens and Boardwalk, but does not own a hotel on either property
  - d. The player does not own a hotel on Marvin Gardens
  - e. The player does not own a hotel on Boardwalk

## Test B

1. When our savants characterize their golden age in any but scientific terms, they emit a quantity of down-at-the-heels platitudes that would gladden the heart of the pettiest politicians. If the word *savant* is used to mean “learned person” or “scholar,” then one can reason that the term is used here in which of the following ways?
  - a. Pedantically
  - b. Metaphorically
  - c. Ironically
  - d. Symbolically
  - e. Literally
2. When we reflect on the serious, although relatively minor, problems that were provoked by the industrial exploitation of coal and electricity, when we reflect that after 150 years, these problems are still not satisfactorily more complex “hows” of the next forty years. In fact, there is one and only one means to their solution, a worldwide totalitarian dictatorship that will allow technique its full scope and at the same time resolve its concomitant difficulties. It is not difficult to understand why the scientists and worshippers of technology prefer not to dwell on their solutions, but rather to leap numbly across the dull and uninteresting intermediary period and land squarely in the golden age. We might indeed ask ourselves if we will succeed in getting through the transition period at all, or if the blood and the suffering required are not perhaps too high a price to pay for this golden age. Which of the following presents a pattern of thinking that is most closely analogous to the preceding situation? Argument by:
  - a. Antithesis
  - b. Negative reasoning
  - c. Induction
  - d. Analogy
  - e. Simile

Questions 3, 4, and 5 come from the following selection.

By the year 2100, voyagers to the moon will be commonplace; so will be commonplace inhabited, artificial satellites. All food will be completely synthetic. The world’s population will have increased fourfold but will have been stabilized. Sea water and ordinary rocks will yield all the necessary metals. Disease, as well as famine, will have been eliminated, and there will be universal hygienic inspection and control. The problems of energy production will have been completely resolved. Serious scientists, it must be repeated, are the source of these predictions, which hitherto were found in Utopia.



3. Which of the following terms, if true, would most accurately describe the author's tone when discussing the "ideal" world of the future?
- Appreciative
  - Captious
  - Humorous
  - Satirical
  - Objective
4. Which of the following, if true, would most strengthen the author's conclusion concerning the enemies of progress?
- One of the enemies of progress is any type of scientific investigation
  - Nationalism may be an enemy of progress
  - An enemy of progress is certainly the Four Horsemen of the Apocalypse
  - Dependence on psychiatrists is an enemy of progress
  - Unrealistic visions of the future hinder progress
5. The conclusion concerning the world of the future as conceived by scientists is based LEAST upon which of the following assumptions?
- Travel in space will be commonplace
  - Instead of embattled nationalities, there will be one world
  - Human beings will be free from disease
  - All food will be artificially produced
  - A unique and varied creativity will exist in the arts

Questions 6 and 7 come from the following selection.

In the domain of genetics, natural reproduction will be forbidden. A stable population will be necessary, and it will consist of the highest human types. Artificial insemination will be employed. This, according to Nobelist J.H. Muller, will "permit the introduction into a carrier uterus of an ovum fertilized in vitro, ovum, and sperm ... having been taken from persons representing the masculine ideal and the feminine ideal, respectively. The reproductive cells in question will preferably be those of persons dead long enough that a true perspective of their lives and works, free from all personal prejudice, can be seen. Such cells will be taken from cell banks and will represent the most precious genetic heritage of humanity ... The method will have to be applied universally. If the people of a single country were to apply this intelligently and intensively ... they would quickly attain a practically invincible level of superiority ... " Here is a future Huxley never dreamed of.

6. The author's preference is based most upon which of the following assumptions?
- Journeys into space will solve many of society's needs
  - Research in genetic engineering will lead to a better human product
  - Governments are the best judges of their people's needs
  - The everyday experiences of daily life enrich existence
  - People can be trained to do any kind of work



7. Which of the following represents the author's effort to state an effective view?
  - a. Only accomplishments possible on the basis of present knowledge are listed
  - b. The need of federal support to initiate scientific research is stressed
  - c. The author extols the contributions of Nobel Prize winners
  - d. What will have been accomplished by A.D. 2500 is exaggerated
  - e. The author expresses hope for the future in a population created in vitro
  
8. Perhaps instead of marvelling or being shocked, we ought to reflect a little. A question no one ever asks when confronted with the scientific wonders of the future concerns the interim period. Consider, for example, the problems of automation, which will become acute in a very short time. How are the prodigious economic problems, for example, of unemployment, to be solved? In Muller's more distant utopia, how shall we get humanity to refrain from begetting children naturally? How shall we force them to submit constant and rigorous hygienic controls? How shall man be persuaded to accept a radical transformation of his traditional modes of nutrition? How and where shall we relocate a billion and a half persons who today make their livings from agriculture and who, in the promised ultra-rapid conversion of the next forty years, will become completely useless as cultivators of the soils? How shall we handle the control and occupation of outer space in order to provide a *modus vivendi*? How shall national boundaries be made to disappear? There are many other "hows," but they are left conveniently unformulated. Which of the following best represents the author's concerns?
  - a. The process by which a scientific and humane Utopia will be achieved
  - b. Feeding a growing population
  - c. The problem involved in eliminating literacy
  - d. The question of how increasing numbers of elderly people can be supported
  - e. The opposition of chauvinistic politicians to a world state

Questions 9 and 10 come from the following selection.

To be beneficent when we can is a duty; and besides this, there are many minds so sympathetically constituted that, without any other motive of vanity or self-interest, they find a pleasure in spreading joy around them, and can take delight in the satisfaction of others so far as it is their own work.

9. Which of the following, if true, would most strengthen the author's definition of sense of duty?
  - a. An outgrowth of patriotism is a sense of duty
  - b. The production of one's heredity and environment is embodied in a sense of duty
  - c. A sense of duty is forced upon one by an authority
  - d. A sense of duty is the true source of beneficence
  - e. A sense of duty is acquired through education



10. Which of the following can be concluded from the preceding information?
- a. The author's belief arises from inclination
  - b. The author's belief can be compared to the sublime in literature
  - c. The author's belief is unrelated to any emotional feeling
  - d. The author's belief has its source in all that's good in human beings
  - e. The author's belief is inculcated in school and church

**Answers**

**Test A**

- 1. e
- 2. b
- 3. c
- 4. c
- 5. d
- 6. c
- 7. e
- 8. c
- 9. b
- 10. e

---

**Test B**

- 1. c
- 2. d
- 3. d
- 4. e
- 5. e
- 6. a
- 7. d
- 8. a
- 9. d
- 10. a



## Appendix 4

### Set of Critical Reasoning Tests after BSC implementation

#### Test A1

1. Which of the following best completes the passage below?

In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because \_\_\_\_\_

- a. some dishonest people taking the survey might have claimed on the survey to be honest
- b. some generally honest people taking the survey might have claimed on the survey to be dishonest
- c. some people who claimed on the survey to be at least a little dishonest may be very dishonest
- d. some people who claimed on the survey to be dishonest may have been answering honestly
- e. some people who are not job applicants are probably at least a little dishonest

Question 2 and 3 are based on the following.

The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana.

2. Which of the following, if true, would most seriously weaken the conclusion drawn in the passage?

- a. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianian's life
- b. The governor of Louisiana has falsely alleged that statistics for his state are inaccurate
- c. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors
- d. Thirty percent of all Louisianians can expect to live longer than 77 years
- e. Most of the Hawaiian Islands have level of air pollution well below the national average of the United States.

3. Which of the following statements, if true, would most significantly strengthen the conclusion drawn in the passage?

- a. As population density increases in Hawaii, life expectancy figures for what that state are likely to be revised downward
- b. Environmental factors tending to favor longevity are abundant in Hawaii and less numerous in Louisiana



- c. Twenty-five percent of all Louisianians who move to Hawaii live longer than 77 years
  - d. Over the last decade, average life expectancy has risen at a higher rate for Louisianian than for Hawaiians
  - e. Studies show that the average life expectancy for Hawaiians who move permanently to Louisiana is roughly equal to that of Hawaiian who remain in Hawaii
4. Insurance Company X is considering issuing a new policy to cover services required by elderly people who suffer from diseases that afflict the elderly. Premiums for the policy must be low enough to attract customers. Therefore, Company X is concerned that the income from policies would not be sufficient to pay for the claims that would be made. Which of the following strategies would be most likely to minimize Company X's losses on policies?
- a. Attracting middle-aged customers unlikely to submit claims for benefits for many years
  - b. Insuring only those individuals who did not suffer any serious diseases as children
  - c. Including a greater number of services in the policy than are included in other policies of lower cost
  - d. Insuring only those individuals who were rejected by other companies for similar policies
  - e. Insuring only those individuals who are wealthy enough to pay for the medical services
5. A program instituted in a particular state allows parents to prepay their children's future college tuition at current rates. The program then pays the tuition annually for the child at any of the state's public colleges in which the child enrolls. Parents should participate in the program as a means of decreasing the cost for their children's college education. Which of the following, if true, is the most appropriate reason for parents NOT to participate in the program?
- a. The parents are unsure about which public college in the state the child will attend
  - b. The amount of money accumulated by putting the prepayment funds in an interest-bearing account today will be greater than the total cost of tuition for any of the public colleges when the child enrolls
  - c. The annual cost of tuition at the state's public colleges is expected to increase at a faster rate than the annual increase in the cost of living
  - d. Some of the state's public colleges are contemplating large increases in tuition next year
  - e. The prepayment plan would not cover the cost of room and board at any of the state's public colleges
6. Company Alpha buys free-travel coupons from people who are awarded the coupons by Bravo Airlines for flying frequently on Bravo airplanes. The coupons are sold to people who pay less for the coupons than they would pay by purchasing tickets from Bravo. This marketing of coupons results in lost revenue for Bravo. To discourage



buying and selling of free-travel coupons, it would be best for Bravo Airlines to restrict the:

- a. Number of coupons that a person can be awarded in a particular year
  - b. Use of the coupons to those who were awarded the coupons and members of their immediate families
  - c. Days that the coupons can be used to Monday through Friday
  - d. Amount of time that the coupons can be used after they are issued
  - e. Number of routes on which travellers can use the coupons
7. The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because defrosting vent, which blows only on the front windshield, was turned on full force. Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?
- a. The side windows had no ice condensation on them
  - b. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield
  - c. The speed at which ice on a window melts increases as the temperature of the air blown on the windows increases
  - d. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car
  - e. The defrosting vent operates efficiently even when the heater, which blows warm air toward the feet or faces of the driver and passenger, is on.
8. To prevent some conflicts of interest, Congress could prohibit high-level government officials from accepting positions as lobbyists for three years after such officials leave government service. One such official concluded, however, that such a prohibition would be unfortunate because it would prevent high-level government officials from earning a livelihood for three years. The official's conclusion logically depends on which of the following assumptions?
- a. Laws should not restrict the behavior of former government officials
  - b. Lobbyists are typically people who have previously been high-level government officials
  - c. Low-level government officials do not often become lobbyists when they leave government service
  - d. High-level government officials who leave government service are capable of earning a livelihood only as lobbyists
  - e. High-level government officials who leave government service are currently permitted to act as lobbyists for only three years
9. A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night. Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- a. Bats are steadily losing natural roosting places such as the caves and hollow trees and are thus turning to more developed areas for roosting
  - b. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans
  - c. Bats are regarded as frightening creatures not only in the United States, but also in Europe, Africa, and South America.
  - d. Racoons and owls are shy and active only at night; yet they are not generally feared and persecuted
  - e. People know more about the behavior of other greatly feared animal species such as lions, alligators, and snakes, than they do about the behavior of bats
10. Meteorite explosions in the Earth's atmosphere as large as the one that destroyed forests in Siberia, with approximately the force of a twelve-megaton blasts, occur about once a century.
- The response of highly automated systems controlled by complex computer programs to unexpected circumstances is unpredictable.
- Which of the following conclusion can most properly be drawn, if the statements above are true, about a highly automated nuclear missile defense system controlled by a complex computer program?
- a. Within a century after its construction, the system would react inappropriately and might accidentally start a nuclear war
  - b. The system would be destroyed if an explosion of a large meteorite occurred in the Earth's atmosphere.
  - c. It would be impossible for the system to distinguish the explosion of a large meteorite from the explosion of a nuclear weapon
  - d. Whether the system would respond inappropriately to the explosion of a large meteorite would depend on the location of the blast
  - e. It is not certain what the system's response to the explosion of a large meteorite would be, if its designers did not plan for such a contingency.



## Test B1

Questions 1 and 2 are based on the following passage.

Caffeine, the stimulant in coffee, has been called “the most widely used psychoactive substance on Earth.” Snyder, Daly, and Bruns have recently proposed that caffeine affects behavior by countering the activity in the human brain of a naturally occurring chemical called adenosine. Adenosine normally depresses neuron firing in many areas of the brain. It apparently does this by inhibiting the release of neurotransmitters, chemicals that carry nerve impulses from one neuron to the next. Like many other agents that affect neuron firing, adenosine must first bind to specific receptors on neuronal membranes. There are at least two classes of these receptors, which has been designated A1 and A2. Snyder et al propose that caffeine, which is structurally similar to adenosine, is able to bind to both types of receptors, which prevents adenosine from attaching there and allows the neurons to fire more readily than they otherwise would. Therefore, caffeine might stimulate behavior.

1. Snyder et al suggested that caffeine’s ability to bind to A1 and A2 receptors can be at least partially attributed to which of the following?
  - a. The chemical relationship between caffeine and neurons
  - b. The structural relationship between caffeine and adenosine
  - c. The structural similarity between caffeine and neurotransmitter
  - d. The ability of caffeine to stimulate behavior
  - e. The natural occurrence of caffeine and adenosine in the brain
2. The nature of caffeine would likely to alleviate:
  - a. Malaise
  - b. Ebullience
  - c. Burgeon
  - d. Bloom
  - e. Merriment

Questions 3, 4, and 5 are based on the following passage.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such writers display a poor grasp of what intuition is. Some see it as the opposite of rationality; others view it as an excuse for capriciousness. Isenberg’s recent research on the cognitive processes of senior managers reveals that managers’ intuition is neither of these. Rather, senior managers use intuition in at least five distinct ways. First, they intuitively sense when a problem exists. Second, managers rely on intuition to perform well-learned behavior patterns rapidly. This intuition is not arbitrary or irrational, but is based on years of painstaking practice and hands-on experience that build skills. A third function of intuition is to synthesize isolated bits of data and practice into an integrated picture (often in an “Aha!” experience). Fourth, some managers use intuition as a check on the results of more rational analysis. Most senior executives are familiar with the formal decision analysis models and tools, and those who use such systematic methods for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their



sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which managers recognize familiar patterns.

3. According to the passage, senior managers use intuition in all of the following ways EXCEPT to:
  - a. Precipitate the creation of a solution to a problem
  - b. Recognise a problem
  - c. Convey together disparate facts
  - d. Stipulate clear goals by alleviating triskaidekaphobia
  - e. Endeavour possible solutions to the problem
4. The passage suggests which of the following about the “writers on management”?
  - a. Their writing works were done post-humously
  - b. They have not based their analysis on a sufficiently large sample of actual managers
  - c. They have relied in drawing their conclusions on what managers say rather than on what managers do
  - d. They have misconceived how managers use intuition in making business decisions
  - e. They have not acknowledged the role of intuition in managerial practice.
5. Which of the following best exemplifies an “Aha!” experience?
  - a. A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand
  - b. A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem
  - c. A manager abruptly adjoins seemingly isolated occurrences to constitute a pattern pertinent to the problem at hand
  - d. A manager rapidly identifies the methodology used to compile data yielded by systematic analysis
  - e. A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem

Questions 6, 7, 8 are based on the following passage.

Seeking a competitive advantage, some professional service firms have considered offering unconditional guarantees of satisfaction. Such guarantees specify what clients can expect and what the firm will do if it fails to fulfil these expectations. Particularly with first-time clients, an unconditional guarantee can be an effective marketing tool if the client is very cautious, the firm’s fees are high, the negative consequences of bad service are grave, or business is difficult to obtain through referrals and word-of-mouth. However, an unconditional guarantee can sometime hinder marketing efforts. With its implication that failure is possible, the guarantee may, paradoxically, cause clients to doubt the service firm’s ability to deliver the promised level of service. It may conflict with a firm’s desire to appear sophisticated, or may even suggest that a firm is begging



for business. Indeed, professional firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees.

6. Which of the following is cited in the passage as a goal of some professional service firms in offering unconditional guarantees of satisfaction?
  - a. A boundary on the firm's liability
  - b. Triumphant rivalry against other firms
  - c. Ability to vindicate fee increases
  - d. Attainment of a burgeoned reputation in the field
  - e. Improvement in the quality of the firm's service
7. The issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?
  - a. The legal and medical professions have standards of practice that would be violated by attempts to fulfil such unconditional guarantees
  - b. The results of a lawsuit or medical procedure cannot necessarily be determined in advance by the professionals handling a client's case.
  - c. The dignity of legal and medical profession is undermined by any attempts at marketing of professional services, including unconditional guarantees
  - d. Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlement alone
  - e. Predicting the monetary cost of legal or health care service is more difficult than predicting the monetary cost of other types of professional services.
8. Which of the following hypothetical situations best exemplifies the potential problem of unconditional guarantees that paradoxically cause clients to distrust the service firm's ability to deliver the promised service?
  - a. A physician's unconditional guarantee of satisfaction encourages patients to sue for malpractice if they are no longer ambulatory
  - b. A lawyer's unconditional guarantee of satisfaction makes clients suspect that the lawyer needs to find new clients quickly to increase the firm's income
  - c. A business consultant's unconditional guarantee of satisfaction is undermined when the consultant fails to provide all of the services that are promised
  - d. An architect's unconditional guarantee of satisfaction makes clients wonder how often the architect's buildings fail to please clients
  - e. An accountant's unconditional guarantee of satisfaction leads clients to believe that tax returns prepared by the accountant are certain to be accurate.

Questions 9 and 10 are based on the following passage.

In an attempt to improve the overall performance of clerical workers, many companies have introduced computerized performance monitoring and controlling systems (CPMCS) that record and report a worker's computer driven activities. However, at least one study has shown that such monitoring may not be having the desired effect. In the study, researchers asked monitored clerical workers and their supervisors how assessments of productivity affected supervisors' rating of workers' performance. In contrast to unmonitored workers doing the same work, who without exception identified



the most important elements in their jobs as customer service, the monitored workers and their supervisors all responded that productivity was the critical factor in assigning ratings. This finding suggested that there should have been a strong correlation between a monitored worker's productivity and the overall rating the worker received. However, measurement of relationship between overall rating and individual elements of performance clearly supported the conclusion that supervisors gave considerable weight to criteria such as attendance, accuracy, and indications of customer satisfaction. It is possible that productivity may be a "hygiene factor"; that is, if it is too low, it will hurt the overall rating. But the evidence suggests that beyond the point at which productivity becomes "good enough," higher productivity per se is unlikely to improve a rating.

9. According to the passage, before the final results of the study were known, which of the following seemed likely?
- a. That workers with the highest productivity would also be the most accurate
  - b. That workers who initially achieved high productivity ratings would continue to do so consistently
  - c. That the highest performance ratings would be achieved by workers with the highest productivity
  - d. That the most productive workers would be those whose supervisors claimed to value productivity
  - e. That supervisors who claimed to value productivity would place equal value on customer satisfaction
10. It can be inferred that the author of the passage discussed "unmonitored workers" primarily in order to
- a. Compare the ratings of these workers with the ratings of monitored workers
  - b. Provide an example of a case in which monitoring might be effective
  - c. Provide evidence of an inappropriate use of CPMCS
  - d. Emphasize the effect that CPMCS may have on workers' perceptions of their jobs
  - e. Illustrate the effect that CPMCS may have on worker's rating





Test A1

- 1. A
- 2. C
- 3. B
- 4. A
- 5. B
- 6. B
- 7. B
- 8. D
- 9. D
- 10. E

---

Test B1

- 1. B
- 2. A
- 3. D
- 4. D
- 5. C
- 6. B
- 7. B
- 8. D
- 9. C
- 10. D